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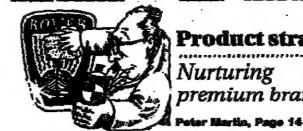
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FINANCIAL TIMES

US politics The Dole depletion



Russian markets AIOC's rise



Product strategy Nurturing premium brands

Today's surveys Pension Fund Investment Information Technoley

Separate Sections

World Business Newspaper

Asian nations criticise policy of development bank

China and Malaysia criticised the Asian Development Bank yesterday for putting tough con-ditions on its loans. Malaysian deputy premier Anwar Ibrahim accused the ADB of "bureaucratic rigidity" towards borrower countries, while Jin Jieyan, deputy governor of the People's Bank of China, said it should "give adequate attention to the importance of economic growth in its pursuit of social development objectives." Page 16: US seeks to bar China, India from fund, Page 6

Offer to Berlusconi: The rightwing alliance headed by former Italian prime minister Silvio Berlusconi is to discuss an offer from the centre-left Olive Tree coalition, which won last month's general election, to take important posts in the new Italian parliament. Page 16; Observer, Page 15

Poor US sales hit Courtaulds: Courtaulds Textiles shares plunged more than 10 per cent in London after Britain's second biggest clothing and fabric maker warned of a sharp drop in US sales. Page 23 and Lex

Stena Line chief Bo Lerenius said the Swedish farry operator was committed to remaining an independent English Channel carrier and was not interested in a merger with Britain's P&O. Page 17

PensiCo stock split: US drinks group PensiCo announced a two-for-one stock split, mirroring the action of its rival, Coca-Cola. The move will double the number of authorised Pepsi chares to 3.6bn. Page 17

Chechen rebel leader alive: Chechen separatist leader Zelimkhan Yandarbiyev, reported by pro-Moscow authorities as having been killed earlier this week, appeared on rebel controlled tele-vision alive and well. He blamed Chechnya's pro-Moscow administration and the Kremlin for spreading rumours of his death. Page 2

Warning to Mediterranean: Countries round the Mediterranean face severe environmental problems unless they change their food production methods, the UN Food and Agriculture Organisation warned. It highlighted water shortages, deforestation and erosion as key risks.



Anson Chan (left), Hong Kong's chief secretary, said the British colonial administration would not co-operate with a legislature Beijing plans to install in the territory. China criticised the refusal, saying British colm Rifkind had earlier this year promised full

Hong Kong, opposition foreign affairs spokesman Robin Cook said a Labour government would give the territory's ethnic minorities full right of abode in Britain if they were stateless after China resumed control HK talks tough, Page 6; Labour pledge, Page 8; Observer, Page 15

US ships near Liberia: US ships move closer to the Liberian coast after the US embassy came under fire during fresh fighting in the capital, Mon-

RAF to leave Germany: Britain's Royal Air Force is leaving Germany, where it has had bases since the and of the second world war. The last UK base, RAF Brüggen, will close in 2002. Page 8

Fires ravage Mongolia: More than 11,000 Mongolians are trying to fight grass fires that have swept to within 19 miles of the capital, Ulan Bator, killing 16 people. Forests and pasturelands are tinder-dry after a winter with little show.

Fayed denies politics plans Mohamed Fayed. Rgyptian chairman of London's luxury store Harrods and owner of the Ritz hotel in Paris, denied reports that he planned to form a new political party in Britain

Chirac attacks supermarkets: French president Jacques Chirac accused the country's supermarkets of drawing customers into "unfriendly" suburban centres and leaving deserted areas in city centres and the countryside. Page 2

Railtrack value: The UK government expects the country's railway lines, stations and signals to be valued at between £1.75bn and £1.95bn (\$2.94bn) when Railtrack is privatised. Page 8; Lex. Page 16

Elektrowatt, Swiss engineering and power group, is to place its 40 per cent holding in UK electronics components distributor Eurodis Electron after failing to find a buyer for the stake. Page 17

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THURSDAY MAY 2 1996

Purchasing managers' index goes above 50% Figures indicate continued growth

economy gathers pace

By Michael Prowse in Washington

The US economy continues to gain momentum after a sluggish period earlier this year, figures on the manufacturing and construction industries indicated yesterday.

The purchasing managers' index - a guide to conditions in manufacturing industry - rose to 50.1 per cent last month from 46.9 per cent in March.

This was the first time the index has risen above the 50 per cent level - the threshold for expansion in the sector - since

July. Most Wall Street economists expected a smaller increase to about 48 per cent.

Separately, the Commerce Department reported a 3 per cent increase in construction spending in March - the largest monthly gain in four years. The Conference Board, a business group based in New York, said the index of leading indicators rose 0.2 per cent in March, extending the large 1.3 per cent increase reported for February.

The ligures follow other signs of a cyclical rebound, including faster than expected growth of retail spending, hig increases in

employment and a revival in consumer confidence. Further information on the state of the economy will come with the sched-uled release today of gross domestic product data for the first quarter and April non-farm

payroll figures due tomorrow.

Mr Richard Berner, chief economist at Mellon Bank in Pittsburgh, said: "I'm looking for economic growth at an annual rate of 3.5 per cent in the second quar-"The Federal Reserve had to "wary and watchful" of inflaearly increase in short-term interest rates remained unlikely,

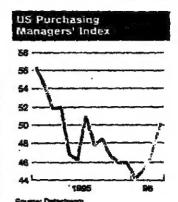
Other economists were less optimistic about growth pros-pects. The industrial sector is probably no longer declining, but neither does it show any sign of acceleration," said analysts at Merrill Lynch in New York. The group expects only a mild acceleration in growth - to about 23 per cent at an annual rate in the second quarter from 1.5 per cent

in the first quarter. The price index compiled by purchasing executives pointed to

tionary pressures although an a modest decline in the prices of manufactured goods despite re-cent jumps in food and energy costs. The downward pressure on prices was a little less strong than in February or March.

The reports also contained encouraging news on orders. The association's index of new orders rose to 53.8 per cent from 49.7 per cent, signalling the first expansion in corporate order books in six months. A production index also rose sharply, although this may have been distorted by the end of a strike at General Motors. the automotive group.

A spokesman for the purchas-



ing managers said executives were guardedly optimistic about future prospects, but still had reservations about the strength



group in TV card lawsuit

By William Lewis in Landon

Questionable tax planning and embarrassing management failures have been revealed by a Financial Times investigation into News Corporation, the nedia and entertainment group

beaded by Mr Ropert Murdoch. Details have emerged of the tax avoidance structure operated at a key News Corp group subsidiary and of disguised consul-tancy payments to executives' foreign bank accounts.

The investigation has also disclosed how internal management

TV SMART CARDS:

AN FT INVESTIGATION

M News Corp says card sharps have cost it £19m

Dark tax affairs in a corner of Rupert Murdoch's empire controls at News Corp group

acy involving employees. In February several compa in the News group, including News International, its main UK subsidiary, started a High Court

failed to hait an alleged conspir

action to recover more than £19m (\$28.7m). The group claims it has been the victim of a conspiracy systematically to overcharge it for a vital component of its worldwide TV interests. The companies' claim relates to the supply of "smart cards" to subscribers to BSkyB, the satellite broadcaster in which News group holds a 40 per cent stake, and other TV companies.

The cards are crucial to the

Smart Card Report

TV and Rudio

Asta-Pacific News ...

World Trade News .

UK News .

News Corp KLM 'considers ending alliance' with Northwest

By Michael Skapinker, Aerospace Correspondent

Northwest Airlines of the US yesterday said KLM of the Netherlands was considering ending the alliance between the two airlines. But the US carrier said it wanted the partnership to con-

Aviation industry executives have been expecting the alliance to collapse since late last year when RLM began legal action over a "poison pill" scheme' adopted by Northwest to protect it against takeover.

An unravelling of the relationship would leave KLM free to seek other partners. It is believed to have had talks with British Airways about an alliance which would create the strongest avia-tion force in Europe, with bases at London's Heathrow airport and Amsterdam's Schiphol.

Industry officials have speculated that BA and KLM might then form an alliance with Amer ican Airlines, which does not have a European partner.

Northwest said yesterday that during a conversation with one of its executives, a KLM official said the Dutch airline was considering three options. The first was to continue the existing arrangement under which the senger schedules closely and sell seats on each other's flights - an arrangement known as code sharing.

The second option was to increase co-operation in areas such as cargo and computer reservation systems. The third option, the KLM official said, was to end the relationship. KLM refused to comment on Northwest's account of this conversa-Continued on Page 16 | tion or on the future of its rela-

CONTENTS

China police halt May Day protest, Northwest said it wanted to continue its alliance with KLM. which it regarded as "very valuable", and to extend it into new areas. Northwest said its arrange-ments with KLM brought it an additional \$50m a year in operat-ing profits. It said KLM gained additional operating profits of \$130m to \$170m a year from the

Northwest said: "We have not initiated any discussion on a break-up, although the legal action by KLM has clouded the alliance. The alliance is benefiting both carriers. We've only scratched the surface of what we

could do together."

KLM's legal action followed Northwest's adoption of a scheme to prevent the Dutch sirline from raising its stake in the US carrier

Page 16 World stocks Page 36

from 18.8 per cent of the voting rights to 25 per cent. Northwest said KLM's conduct "presents strong evidence that KLM represenis a creeping control threat to

KLM countered that there was no prospect of its taking control of Northwest because US rules prevented a foreign carrier from owning more than 25 per cent of a US airline.

In an attempt to repair relations between the two airlines. Mr Pieter Bouw, KLM's president, and two of his fellow senior executives stepped down from the Northwest board in February to make way for independent directors. KLM said at the time the dispute was between shareholders and not between the two airlines themselves.

Wall SafBoureds

Person Fund Investment

Trade unionists march through Belgrade in a May Day protest holding a banner proclaiming 'bread and democracy. Hundreds of demonstra-tors signafied their opposition to the policies of Serbian president Siobodan Milosovic. At one of more than 100 May Day railies across Germany a leading trade unionist vowed tough opposition to the government's plans to cut spending and reform the welfare state. German threat, Page 2;

Cummins joins Fiat in \$300m engine venture

Cummins Engine of the US and the Iveco and New Holland sub-sidiaries of Fiat of Italy have launched a \$300m project to develop low pollution, fuel-efficient diesel engines for trucks, farm equipment and buses.
The three-way joint venture, to
be called the European Engine

Alliance, will invest \$200m on a new factory in Turin and \$100m on a UK development centre.

The project, reflects the trend already well advanced in the aerospace industry of companies sharing with rivals the costs and risks of long-term, large-scale

development projects. Engine development costs for many types of projects have lution and noise regulations and the use of more sophisticated manufacturing technologies. It is thought that Fiat examined a range of other options before choosing the Cummins collabora-

tion as the most cost effective.

The partners reckon that by around 2007, they will be producing some 400,000 of the new engines a year. Slightly more than half will be used by Cum-mins in its own businesses, and the rest shared between New Holland, one of the world's top three tractor makers, and Iveco,

company and a builder of buses. Mr James Henderson, chairman of Cummins, said the partnership would "greatly accelerate our sales" in Europe, while Mr Riccardo Ruggeri, chief executive of New Holland, said the partner-

ship would lead to the most

advanced diesel engines on the

Mr Carl Ahlers, an executive who has worked for all three partners, will head the alliance which will be based near London at a location yet to be decided. The move underlines the UK's good record in setting up new engine development operations, bringing Britain roughly level with Germany among European countries housing important new engine development for the auto-

motive industry. The new Turin factory will turn out early next century some 240,000 of the new, mainly four or six-litre, engines a year. Half of them will go to New Holland for use in tractors, and other farm machines such as grape har-

vesters and baling vehicles Iveco and Cummins will share the remaining 120,000 engines a year, for putting into trucks and buses made by Iveco and for a range of applications on behalf of

Continued on Page 16

This announcement appears as a matter of record only

£371,500,000

Management Buyout of



Dunlop Slazenger Group

Maxfli

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Equity provided by CINVen Funds

Debt facilities arranged and provided by Natwest Markets Acquisition Finance

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FT Acaustics

Foreign Exchanges .

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By Chrystia Freeland

Across much of the former USSR, May Day - once a ritualised tribute to Soviet rule was yesterday transformed into an occasion for passionate, but largely peaceful, political

The battle of the titans was in Moscow, where President Boris Yeltsin and Mr Gennady Zyuganov, his Communist rival in the June 16 presiden-tial ballot, held competing ral-

Although Mr Yeltsin has been steadily rising in the polls, his crowd of several thousands was outnumbered by Zyuganov supporters who turned up at the statue of Karl Marx near the Bolshoi Theatre to hear their man speak.

Mr Yeltsin, who has ignored the traditional May Day rally in previous years, told his raindrenched backers: "We have come together at this rally to support a radical change for Russia. We must win the election to confirm we are going the right way and we will

In St Petersburg, which supported reformers more strongly than any other Russian city in parliamentary elections last year, an even bigger crowd of Communist supporters took to the streets to celebrate the workers' holiday. Russian agencies said that as many as 35.000 marched down Nevsky Prospekt, the city's fabled main street, chanting and carrying red banners.

More than 20,000 people reportedly took to the streets of neighbouring Belarus, many of them protesting at deteriorsome voicing their opposition to the strong-arm rule of President Alexander Lukashenko. Yesterday's demonstration was reportedly more peaceful than a rally on Friday which was violently broken up by police. About 10,000 demonstrators in Athens demanded government action to fight unemployment and an end to austerity measures which have seen wages lagging behind the annual 9 per cent inflation

Two people were killed and six injured when police clashed with workers in Istanbul before the start of a May Day demonstration. The clash began when some workers gathering for a demonstration refused to be searched.

Russian debt deal ready for creditor banks

By George Graham and Graham Bowley in London

A deal to reschedule \$33.1bn of Russia's debt repayments to commercial banks could be completed as early as the autumn if individual creditor banks accept the details of a package worked out this week in

Deutsche Bank, which chairs the Russian advisory committee of the London Club of commercial bank creditors, said agreement had been reached on the outstanding issues.

Detailed documentation on the

banks which hold Russian debt, with the endorsement of the 13 main crediters who make up the London Club advisory committee.

The London Club proposals follow a provisional agreement last November and a deal signed earlier this week between Russia and the Paris Club of creditor governments for the rescheduling of more than \$40bn of

Both deals are underpinned by Russia's agreement earlier this year

reform programme backed by a

Analysis said that although progress on the London Club deal had been widely expected, it was an important part of Russia's effort to join the international financial community as a member in good standing. They also said the debt talks would help set the stage for a new Rurobond issue later this year.

"These are all signposts on the way for Russia becoming internationally credit-worthy again," said

terms will be sent out in the next with the International Monetary Mr Jonathan Hoffman, a director in from individual creditor banks. few weeks to the several hundred Fund on a three-year economic economics at CS First Boston. "One Although obstacles of this sort have signpost was the IMF deal; another is the Paris Club; this is the third;

> the fourth will be the election." But western investors warned that Russia's success in attracting foreign capital could also hinge on the outcome of June elections, in which President Boris Yeltsin faces a strong challenge from his Communist rival, Mr Gennady Zyuganov.

Bankers close to the negotiations said it was considered extremely unlikely that the London Club deal could now be held up by objections

arisen in some similar reschedulings, such as Brazil's, it is not believed that large holdings of Russian debt have been amassed by any single creditor. Nevertheless, Russian debt has been so widely traded in the secondary market that it is still not entirely clear who holds

which debts. Reconciling claims could now take several months. Although creditor banks hope to finish the process by the autumn, some bankers believe it could drag on into the winter.

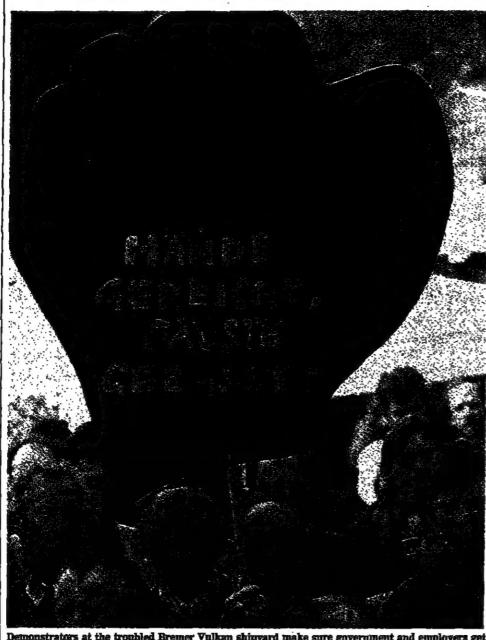
The London Club deal will spread \$25.6bn of principal payments and \$7.5bn of accrued interest over 25 years, with a six-year grace-period. The first payments will fall due in

December 2002 The negotiations have dragged out over four years, including a one-year delay while the London Club tried unsuccessfully to persuade Russia to

abandon its sovereign immunity.
Russia was advised in the negotiations by Cleary Gottlieb, the US law firm, and by SBC Warburg, the London investment bank owned by Swiss Bank Corporation.

Head of union federation threatens to oppose government cuts with 'clenched fist'

Fierce attack on German welfare plan



Demonstrators at the troubled Bremer Vulkan shippard make sure government and employers get their message: "Hands offered. Fists clenched" proclaims the banner

Germany's leading trade unionist yesterday vowed to use a "clenched fist" in the fight against spending cuts and changes in the welfare state proposed by the government. Addressing 20,000 union members in Berlin at one of

more than 100 May Day rallies throughout Germany, Mr Dieter Schulte, president of the DGB union federation, threatened massive opposition to government plans to save DM50bn (\$33bu) in public spending and to relax laws on sick pay and dismissal

"Under the pretext of alleged abuses of social benefits the government decided to fight the unemployed, rather than unemployment." Mr Schulte said. "In doing so it has become the tool of employer interests. We have held out our hands for an alliance for jobs, but if others are looking for conflict, they will have to grip our cleached fists."

The unusually militant com-ments reflect union fears that the government and employers are colluding to roll back the consensus-based welfare state. Mr Klaus Zwickel, president of the IG Metall metalworkers' union, warned: "We will not hesitate to use every available means of industrial strife." OTV, the public sector union, promised a "dramatic wage

round" if the government pressed ahead with a public sector wage freeze this year. Mr Zwickel is particularly opposed to government plans to change Germany's generous system of sick pay, which entities employees to full wages -including bonuses and regular overtime - from the first day

The government's proposal to limit sick pay to 80 per cent of basic pay would not affect sick pay arrangements in many industries, including the metal and engineering sectors, where the current arrangements are enshrined in collec-

tive agreements.

But the trade unions' increasingly confrontational stance suggests that if employing contracts, they might risk massive protests, similar to those in the late 1950s when IG Metall secured the current sick

pay arrangement. Yesterday's demonstrations came as an opinion poli suggested that the budget cuts which also include a post-

ponement of a child benefit increase and reductions in health care provisions - are unpopular with the public at large. The poll by the Forsa earch organisation found 72 per cent against the plans and about 90 per cent support for the view that the government was not doing enough to com-

Despite the strong sentiments expressed yesterday, it is not clear whether the unions would be able to call substantial strikes at a time of record unemployment. More than 4m Germans are registered unem-ployed, about 11 per cent of the

Mr Peter Hintze, general secretary of Chancellor Helmut Kohl's Christian Democratic Union, warned the unions yesterday not "to revert to the old rituals of class warfare".

German employers have given the government proposals a cautious welcome as a move in the right direction. In a comment bound to infuriate the trade unions further, Mr Klaus Murmann, president of the employers' federation, said Germany would need to create some low-paid jobs to remain

right confrontation over such

issues as out-of-town develop-

ment, among which the delay

on the airport is the most cele-

Mr Michael-Andreas Butz.

spokesman for the Berlin Sen-

ate, the city government, says

that without a merger such

tensions will continue to

plague relations between the

states and lead to an increase in bureaucracy. "To resolve

these issue an estimated 200

state treaties would need to be

Such arguments have failed

to impress the majority in

either state. According to an opinion poll published last weekend by the Tagesspiegel

newspaper 45 per cent of Ber-

liners support a merger and 33 per cent are opposed, while in Brandenburg 39 per cent were

in favour and 47 per cent

One reason for such opposi-

tion is history. Some Branden-burgers feel a united state

would bring a return to the

days, both under Prussian and

communist rule, when it lost

out to the more populous and

The PDS has taken up these

fears in its anti-merger cam-paign. In Brandenburg the

party compares merger to a re-

run of German unification.

when, they say, the east was all but swallowed up by the

Mr Martin Maty, head of the

liberal Free Democratic party

in Berlin, says failure to

endorse the merger would have

wider repercussions. "The

other Lander are waiting to see

the result here. If a merger cannot be done here in two

states, where the administra-

tive structures are not yet fully developed, then it can never be

done in those areas where

structures are well estab-

Among other states consid-

negotiated," he says.

EUROPEAN NEWS DIGEST

Chirac hits at superstores

President Chirac vesterday accused France's supermarkets of having an "extraordinarily negative" influence in drawing customers into their big "unfriendly" suburban centres and creating "deserted areas" in city centres and the countryside.

The president's broadside against large-scale retailing,

which he chose to describe as a "purely French phenomenon which hardly exists anywhere else", came as he received a traditional May Day delegation of small shopkeepers. His remarks follow the French cabinet's endorsement on Monday of further draft legislation to protect small shopkeepers. The legislation would tighten planning permission for all new supermarkets of more than 300 square metres. The country's large retailers are already up in arms about a government bill to restrict their ability to offer

discounts in the interest of banning "predatory pricing".

Mr Chirac's rhetoric may encourage the centre-right majority in parliament to amend government proposals on planning permission by making them tougher still on the supermarkets, as deputies are in the process of doing on retail pricing proposals.

'Dead' Chechen leader reappears



righten security in Moscow.

the Chechen leader reported dead by Russian news agencies; appeared (left) on local television on Tuesday night and vowed to continue the separatist fight against Moscow until the last soldier. Speaking on a television channel used by the Chechen resistance, Mr Yandarbiyev said there were many fighters who could replace him even if he were killed. The Chechen istance was prepared to "fulfil the cause to the end." he said. Reports that Mr Yandarbiyev had been killed in a skirmish between feuding Chechen groups spread through Grozny on Monday

Mr Zelimkhan Yandarbiyev.

and were gleefully seized upon by Russian military commanders as evidence the rebel leadership was splintering. Mr Yandarbiyev, a nationalist writer and a forceful advocate of Chechnya's independence bid in 1991, took over as leader after General Dzhokhar Dudayev was killed in a Russian rocket attack on April 21. Mr Yandarbiyev has pledged he will revenge Mr Dudayev's death, prompting Russian authorities to tighten security in Moscow. John Thornkill, Moscow

Spanish unions warn new PM

Spanish trade unions used May Day rallies yesterday to brace themselves for their first dealings with a new centre-right

Both main trade union federations, the General Workers' Union (UGT) and Workers' Commissions (CCOO), called on the incoming prime minister, Mr José Maria Aznar, to start the talks he promised in his election campaign, and warned him they would fight any cuts in social benefits. Mr Cándido Méndes, the UGT leader, said at the end of a

march in Madrid: "The new government should be pretty clear the unions will not put up with any erosion of our social protection." He warned that any cuts in education, health, inemployment benefits or pensions would bring

Mr Aznar promised to start talks on a job-creation pact with the unions immediately after the March 3 elections won by his Popular party. But he had to put the meetings off while he negotiated instead with regional parties to enlist support for a

Spain's farmers go anti-French

Spanish farmers plan to stage an anti-French day today in retaliation for the latest resurgence of attacks on trucks carrying Spanish strawberries and other agricultural produce across the French border.

Spain's main farmers' body, COAG, said it would stage countrywide protests evoking the uprising of May 2, 1806, against Napoleonic occupation forces, an event commemorated by a public holiday in the Madrid region.

Along with other farmers' unions, it is calling for a boycott of French farm products and one of its leaders has warned of a violent response if the incidents continued. COAG complains that attacks by what it calls "bands of French vandals" have not diminished in the 10 years since Spain joined the European Union.

Freedom party urges restrictions Mr Jörg Haider, leader of Austria's rightwing Freedom party. told a May Day rally there were too many foreigners working in the country and said it had to reduce greatly the number of

immigrants to fight unemployment.
"In Austria we have 300,000 unemployed and 300,000 registered foreigners," Mr Haider told supporters in the eastern province of Burgenland. "We finally have to consider

how to cut back on foreigners in Austria." Mr Haider, whose party won nearly a quarter of the votes in the general election in December, was immediately attacked by the ruling Social Democrats who accused him of cheap polemics. At 3.9 per cent, Austria's unemployment rate i among the lowest in Europe.

The remarks came as parties began preparing for important municipal elections on October 13 in Vienna, a long-time Social Democratic stronghold with provincial status. Immigrants, who make up 9 per cent of Austria's 8m population, are concentrated in the city.

Poland enters smoke-free zone

A law aimed at limiting smoking took effect yesterday in Poland, where the habit is rife. Indoor smoking in workplaces. public buildings, hospitals and similar sites will be allowed only in designated areas. Cigarettes will no longer be sold singly to those under 18 or in vending machines.

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Tobacco advertising will be formally banned on broadcast media, in cinemas and in youth and children's publications. Under the law, 20 per cent of the area of tobacco adverts must consist of health warnings. Within a year cigarette packets will have to carry two warnings, covering 30 per cent of their surface. Poland is an expanding market for the large international tobacco companies. In a country of 89m, 8m men and 4m women smoke 100bn cigarettes a year. Reuter, Warsaw

Will Berlin knock down its political Wall?

Frederick Stüdemann on a referendum on whether to merge with former eastern state of Brandenburg

ix years since the Sinances for a new airport in Berlin were approved, the governments of the city and of the state of Brandenburg still cannot agree where to build it.

For locals it has become one of those on-going sagas you don't know whether to laugh

or cry over. What is serious enough. though, is that the dispute is depriving the region of the investment and jobs the new airport would bring.

This Sunday, Berliners and Brandenburgers are being offered the chance to make such costly wrangles a thing of the past when they go to the polls to vote in a referendum on whether to merge. If they decide to do so, Ber-liners and Brandenburgers will

not only be removing one of the relics of Germany's postwar settlement but also opening the door to further possible mergers among other Länder (states), which would represent an important change to the

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country's political fabric.

For the Berlin airport débacle also highlights the problems caused by the German federal system, particularly in the case of the country's city-states, whose infrastructure planning relies on the co-operation of a neigh-

A reform of the Lander system has been proposed by poli-ticians and constitutional experts ever since the Federal Republic of (West) Germany was founded in 1949. In the 1970s a government commission recommended that for a state to be economically viable it should have at least 5m inhabitants, a condition satisfied by only five of the coun-

try's 16 states. Such proposals have always foundered on regional pride and political interests. Many powerful politicians are reluctant to see any dilution of their state-based powers which at the federal level are reflected represented in the upper

For the Berlin-Brandenburg merger to go through, a majority of voters in both states must separately approve the proposal. Voters will also be asked to choose between 1999 and 2002 as a preferred date for it to be completed.

A merger is supported by the leaders of both states - Mr Eberhard Diepgen, the Christian Democrat mayor of Berlin and Brandenburg's Social Democrat premier, Mr Manfred Stolpe, who negotiated a

merger treaty last year. The two leaders argue that a merger would deliver significant economic benefits. Unemployment is high in both states. Berlin is heavily with its own reunification. Brandenburg, which was wholly in East Germany, is thinly populated and still heavily dependent on federal

subsidies. Mr Diegpen and Mr Stolpe argue that a single state would bring streamlined administration, common planning procedures and the ability to present

Berlin and Brandenburg: anatomy of a merger 10 May 50 kg

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Serious condition of city's finances revealed

The parlous state of Berlin's finances was highlighted yesterday when the Bonn finance ministry disclosed that the city's delicit last year was 36 per cent higher than planned following a slump in revenues, writes Peter Norman in Bonn.

A provisional analysis of the finances of the Länder (federal states) showed that Berlin ran up a deficit of DM10.1bn (\$6.6bn) last year, against a planned DM7.4bm, and accounted for more than a fifth of the overall DM45.7bn deficit of Germany's 16 Länder.

The city's expenditure rose by 4.3 per cent to DM42.3bn, but ended some DM600m below budget. Income of DM32.2bn was 3.2 per cent below that of 1994. The sharp deterioration in finances reflected a shortfall of more than DM3.2bn in income compared with the budget,

with tax revenues some DM2bn below plan. Mr Hansgeorg Hauser, a state secretary in the Boun finance ministry, said the budgetary position in all the states was difficult last year ut the situation in Berlin had become acute. He called on Linder to intensify efforts to control spending and urged them to co-ordinate the consolidation of their budgets in a 'national stability pact" with Bonn. The ministry said the five new Länder of

eastern Germany had been unable to keep their deficits within budget in spite of spending less than planned. Their overall deficit amounted to DM12.6bn last year against a planned DMI10_8hu_

The 10 western Länder had an overall deficit of DM23bn in 1995, only slightly higher than the DM22.9bn envisaged.

world. They say this would improve the investment climate in the region leading to the creation of up to 80,000 new iobs over 10 years.

Berlin officials say ending

duplication of government and

administration would deliver

year. The capital of the unified

population of 6m, would be Potsdam, currently the home of the Brandenburg government. Berlin would be a metropolitan district as well as the seat of national government. The merger is backed by all

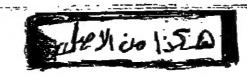
indebted and still struggling a united front to the outside Berlin-Brandenburg with a that the treaty does not offer are in favour.

business leaders from across the main political parties the region welcomed a possible savings of DM1bn (\$600m) a except the Party of Democratic end to competing jurisdictions, Socialism, east Germany's which have in the past led to state, which would be called reformed communists, who say protracted negotiations or out-

enough guarantees for jobs, specifically in agriculture and the public sector. Business organisations and trade unions

ered ripe for a merger are the A recent meeting of 1,800

city-states of Bremen and Hamburg, which reformers say should be brought together. with neighbouring Schleswig-Holstein and Lower Saxony into a single Nord Staat of



The future of Poland's ailing Gdansk shipyard is in the bal-ance as the Privatisation Munistry sifts through low-price bids. Potential buyers of the yard are Norwegian and German shipowners and a group of US investors, while a South Korean shipyard group hovers in the background.

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A team from LG Group, the South Korean conglomerate, visited Gdansk this week, but the company denied reports it had made an offer.

The Privatisation Ministry has floated the idea of including Cdansk in an industry-wide holding company and recently proposed to O J Libaek and Partners, a Norwegian shipowning group, and to Daewoo, the Korean industrial conglomerate, that they take a stake in the company, which would control the three main gards of Gdansk, Gdynia and

However, until now Liback's focus has been on the more modern and better equipped Gdynia yard, a few miles along the coast from Gdansk, and it has also held talks with the Szczecin yard, considered the most successful of the coun-

try's shipbuilders. It will be an uphill struggle for the government to persuade foreign investors to include Gdansk in their future

The Privatisation Ministry is ready to dispose of all or part of its 60 per cent stake in the Gdansk yard's equity, but industry sources believe any potential bidder is unlikely to offer more than a token purchase price and demand in exchange outright control of

But the assumption of control requires first gaining the consent of the yard's 7,000strong workforce which owns 40 per cent of the equity. This stake was handed over by the government two years ago.

The workers have already voted to accept 2,000 job cuts but this is not enough to can-cel out the shipyard's serious financial problems. Only a

Christopher Bobinski reports from Warsaw on continuing efforts to sell a symbol of Poland's past

third of March's wages have been paid, telephones have been cut and power supplie are limited because of unpaid

Last year the yard lost 85m zlotys (\$62m), raising accumu-lated losses beyond 300m zlotys. Bank Handlowy, the main creditor, has refused further financing and has turned down a plan to write-down its loans as it holds Treasury guaran-tees on much of its lending to the yard.

But shipowners from Germany, Norway and Denmark recently provided some relief by waiving \$19m in penalty payments.

These were sparked off by delays in delivering four ves-sels currently under construc-

They also accepted cuts in the standard of equipment of the four ships and agreed similar cuts on a total of 21 ships on order in a package worth up to \$1m per ship.

In return they are demanding government guarantees against any losses they might incur if the ships are not com-

The vard's management estimates that it needs 100m zlotys in working capital to complete ships under construction and additional loans to cover fixed costs worth around 13m rlotys

But if no new owner emerge the government will have to decide whether to recapitalise Gdansk itself - and then face similar demands from other ailing industrial giants.

A last resort is to summon the political courage to close the yard known around the

Future of | Collective farmer with tsarist ambitions

guest, receiving klases from the Russian president and a blessing from the Orthodox Patriarch after signing a union treaty with Russia. But back home in Minsk, the

Belarusian capital, Mr Lukashenko has been having tougher time, as western observers and local activists have stepped up their accusa-tions that he is turning the Slavic state of 10m people into an authoritarian regime bark-ing back to the Soviet Union. At a time when many other

former Soviet cities are swiftly shedding their communist skins, in its outward appearance Minsk has become a throwback to the ancien régime. A towering statue of Lenin dominates the city's central square and nearby the republic's Soviet era red flag, which has been restored as the nation's official symbol, flutters proudly.

Belarusian politicians and their western sympathisers are ever more troubled by signs that Mr Lukasbenko is reclaiming the substance, as well as the symbols, of an earlier era.

Last week his security forces brutally broke up a demonstration by more than 40,000 protesters. At least 200 people, some of them uninvolved bystanders, swept up in a police dragnet, were arrested and held incommunicado for three days. Some activists could face criminal charges and lengthy prison sentences. Leading activists opposed to Mr Lukashenko have had their homes searched and been



Hardliner: Belarusian President Alexander Lukashenko

arrested by police. A few others have gone into hiding.

The crackdown, and Mr Lukashenko's gradual erosion of the independence of the judiciary, the media, parliament and even private business, have led some observers to accuse him of building "a police state" which is reminiscent of a "Latin-American style junta". Surrounded by a

bery of beefy but nervous aides in his official residence, Mr Lukashenko is unrepen-

In an interview with the Financial Times, the president described last week's demonstration, which was a protest against his government and his hopes of forming a full political and economic union with Russia, as "a meeting of the fascist opposition". The demonstrators, he says, were "drunk and stoned", and he elaims the journalists who were beaten at the rally were victims of the demonstrators and not of his security forces. The demonstration was one

of four mass opposition rallies held over the past month --including one yesterday. We reacted calmly, we didn't pro-voke anyone," he said. "Let me assure you that if we had wanted a fight there would have been a real one. In demo-cratic countries... they would just hit such people over the head with a truncheon and been done with all discus-

Mr Lukashenko, aged 40and a former collective farm manager, is not embarrassed by domestic accusations - backed by a recent US State Depart-ment report on Belarus which accused him of muzzling the media.

According to the State Department, Mr Lukashenko enjoys "essentially complete control of the broadcast media" and has banned the main opposition newspapers from using the state postal services or the state's monop-oly printing press, forcing them to publish abroad and rely on less effective private

distribution channels.
Mr Lukashenko dismisses these charges, arguing that the opposition press is mentally unbalanced.

"If you read what the oppo-sition press writes about me you would simply be horrified and you would say, they must be deranged people," he says. Nonetheless, in what Mr Lukashenko holds out as an example of Belarusian liberalism, "we have not closed a sin-

sle publication, although we ought to have done so, purely

according to laws." The Belarusian opposition chafes at Mr Lukashenko's cavalier disregard for the civil liberties of his compatriots, but what pains them most is the argument which is the president's trump card: his tre-mendous public popularity.

'For me the will of the Slavic peoples is a law. If their will is to send me far beyond the borders of our state I will go'

The recent demonstrations suggest that a sizeable number of Belarus's normally hiddable people have become angry about the slide into authoritar-

But the silent majority, or at least 50 per cent according to independent polisters, is still firmly behind the populist leader who was a political unknown until his surprise victory in Belarus's 1994 presidential elections.

"Am I a dictator or not?" Mr Lukashenko asks. "With such extraordinarily high popularity, why would I need to run the country with dictatorial Belarus's despairing liberals

Chrystia Freeland

man to underestimate.

sustained popularity to the

downtrodden, Soviet-era mentality of their people.

Seventy years of commu-

nism, they say, have taught

many Belarusians to admire an iron-fisted leader who

makes populist promises to

the masses and keeps the

streets clean, no matter what

be may do to the chattering

But some observers warm

that Belarus, which today

harks back to the Soviet past, could also be a harbinger of

Russia's future. Mr Lukashenko, who is the

strongest advocate of a full

political union between the

two Slav states, is said to cher-

ish hopes of one day being the

Russian-Belarusian confedera

tion. Mr Lukashenko does not

openly admit to such ambi-tions. But he is confident that "80 per cent" of the Russian

people are already his

supporters.
He coyly concedes: "For me the will of the Slavic peoples is

a law. If their will is to send

me far beyond the borders of

our state I will go."
As the contest between Mr Yeltsin and his communist

rival, Mr Gennady Zynganov.

intensifies in Russia, Mr

Lukashenko's solemn pledge seems like comic relief from

the main event. But Mr Lukasheuko is a skil-

ful politician who has mas-

tered the trick of catering to

the post-Soviet electorate's

dual craving for populism and

for order. As the Belarusians

have learned, he is an easy

Swissair tries to defuse Geneva-Zurich row

Swissair yesterday announced a series of improvements in its services from Geneva in an attempt to curb criticism of its decision to switch 13 of 15 long-haul flights from the city's airport to Zurich airport, Reuter reports from Zurich.

The government, which has been critical of the airline's proposal, said it would look into the "consequences" of the Swissair measures. Last week federal and local officials asked the airline to reconsider its plans to transfer Geneva's connections with the

Angeles to Zurich, with Geneva retaining links with New York and Washington as well as all European connections.

The controversy has highlighted tensions between western, Frenchspeaking Switzerland, where Geneva is the dominant city, and the Germanspeaking east, centred on Zurich. There were also protests from busi-

nesses operating in the Geneva area. Swissair said yesterday it would go ahead with its plan to ease intercontithe reductions with 10 daily shuttle flights between Geneva and Zurich starting in November.

Passengers on the 30-minute shuttles to Zurich would have a transfer time of 40-60 minutes for the main intercontinental flights, a much quicker transit time than at most European airports. Ticket prices for long-haul flights would be the same whether boarding in Zurich or

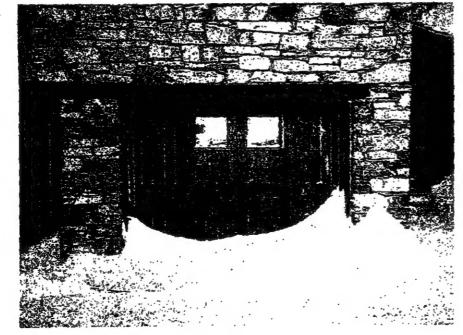
Swissair said airlines from coun-

Middle East, West Africa and Los nental connections to Geneva after tries which did not have air traffic agreements with Switzerland should be encouraged to gain access to the Swiss market in general and Geneva in particular. This would require mutual liberalisation of air traffic rights by Switzerland and the other

countries involved. The company said it would continue to offer more than 500 flights weekly between Geneva and north Africa, New York, Washington and many European destinations. Its regional subsidiary, Crossair, would add extra European flights from Geneva. "Swissair and Crossair currently serve 40 destinations via direct flights from Geneva. The growth in Crossair's European service over the last five years will continue," it said. Swissair rejected a suggestion by Geneva politicians that Crossali should be allowed to offer intercontinental connections from Geneva. "Solid, long-term economic health is needed for the Swissair group to meet

the demands that are being made of

it." Swissair said in its statement.



Most convertibles spend nine months of the year in jail. Not the Saab.



Here in Sweden, we don't enjoy endsolid soundproofing and good look even with the top up



Later Later

US keeps rest of world hanging on the line

Frances Williams on why attempts to agree a global pact on liberalising telecoms trade have been delayed

sation director general, put on a brave face vesterday after negotiators failed to meet Tuesday's midnight deadline for agreeing a global pact on telecoms liberalisation and instead put off a decision until

He said he hoped for an even bigger telecoms liberalisation package then. "This is certainly the spirit in which I have presented the compromise: to safeguard what has been achieved, to safeguard the timetable and to give the possi-

bility of an improvement."

The decision ended two days of frantic negotiations on how to prevent the collapse of the talks, once it became clear on Monday that the US did not intend to join an emerging

Washington's trading part-ners did not disguise their frus-tration that their efforts had again been undermined by a US administration seemingly more concerned with appeasing narrow domestic political and industrial interests than with securing the wider bene-fits of a multilateral deal.

This time, moreover, the European Union was in no position to salvage an accord as it did for financial services last summer. Without the US market - accounting for a third of world telecoms revenues of \$513bn in 1994 - an accord would have little value.

Instead, the 53 countries taking part in the talks - together counting for over nine-tenths of world revenues - have agreed to put their best marment by February 15. All being well, the WTO telecoms accord will come into force on January 1 1998 as planned.

However, it will also be possible for countries, including the US, to downgrade or withdraw their market-opening propossis, with the risk once again that a deal could col-

Washington, whose own ambitious offer would have opened almost all domestic and

A telecoms accord could save users more than \$1,000bn over the next 12 years

international services to foreign competition, rejected a deal this week for three main

 It did not have the neces sary "critical mass" of good quality offers from others, especially in Asia. Ms Charlene Barshefsky, acting US trade representative, said more than 40 per cent of world telecom revenues and more than 34 per cent of global international traffic were not covered by acceptable offers.

Against that, a number of Latin American and eastern European countries made what even the US concedes were. good offers to boost competition in their markets. Some 30 countries also agreed to adopt

r Renato Ruggiero, ket-opening offers "in the all or some of the pro-competi-World Trade Organi- fridge" for further improve- tive regulatory principles designed to guard against abuse of market power by dommant domestic operators.

The US also secured most of what it wanted from the EU and Japan. Japan has fully opened its telecoms market to competition and dropped all foreign ownership restrictions apart from a 20 per cent limit on holdings in its two principal operators, NTT and KDD.

Meanwhile, EU ministers agreed to lift remaining curbs on foreign ownership of telecoms companies by France, Belgium, Spain and Portugal, provided the US kept its promise to relax restrictions on the landing of submarine cables.

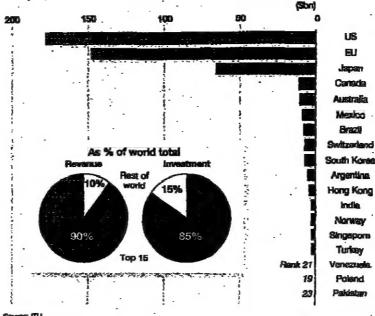
Canada, alone of the four Quad leading traders, has not allowed majority foreign con-trol of telecoms companies, though it has agreed to dismantle monopolies for overseas and satellite services.

· Washington wanted the right to reject applications to operate international services out of the US from carriers with or associated with a home-country monopoly.

The worry was that monop oly operators charging high prices to connect calls in their domestic market could take unfair advantage of cheap international rates on calls out of the US and other liberalised

The EU and others said the US position was tantamount to imposing reciprocity conditions, contrary to WTO nondiscrimination rules. However, Washington rejected as inade-

World telecoms: the market leaders



quate an alternative "competitive safeguards" clause which would have allowed national competition authorities to impose conditions on all licence holders to prevent

 The US said it intended to withdraw satellite services from its offer because only about 10 participants had guar-anteed US access to their own satellite markets. The EU claimed this was really an attempt to hamper competition with US-based companies plan-ning worldwide satellite-based mobile telephone systems.

There are some reasons to hope a deal may be easier to strike next February. Most governments, faced with the rapid pace of technological advance and increased competitive sures, are moving towards ever-greater liberalisation.

A number of countries among them Australia, Brazil, Switzerland and Thailand plan legislation to increase competition in their telecoms markets. South Africa, an observer to the WTO talks. said on Tuesday it hoped to submit an offer in the near

The economic stakes are high. According to the Washington-based Institute for International Economics, a telecoms accord could save users in rich and poor countries more than \$1,000bm over the next 12 years in lower charges, better service and improved technology.

Foreign investment would also help developing countries raise the \$60bn the World Bank says they need to spend over the next five years to bring their telecoms systems up to

But a success in telecome would also give a boost to the multilateral trading system by showing that the WTO can effectively negotiate trade lib-eralisation in new domains like services, investment and competition policy.

The postponement of the telecoms talks follows only a partial deal in financial services last year while talks on maritime services, the third set of negotiations left over from the Uruguay Round, look set to WORLD TRADE NEWS DIGEST

Brittan set for Tokyo chip talks

Sir Leon Brittan, the EU trade commissioner, will discuss trade in semiconductors when he visits Japan with 30 European businessmen next week. Mr Tomio Tsutsumi, vice minister of the Japanese Ministry of International Trade and Industry, said the two sides would discuss European participation in the talks between Japan and the US over the extension of the bilateral semiconductor accord. The US and Japanese governments are currently wrangling over the extension of the bilateral trade agreement, which sets a quota of foreign market share in Japan's semiconductor market. The accord expires on July 31.

Along with Japan, the EU is opposed to an extension of the agreement, but it is calling for a new semiconductor trade framework which involves Europe. Emiko Terazono, Tokyo

VW to invest in India

Volkswagen, Europe's biggest carmaker, is the latest vehicles group to unveil plans for the expanding Indian market, where it intends to establish a joint venture with Eicher Motors. The deal involves cars from VW's Audi and Skoda subsidiaries. Audi plans to introduce its A6 executive saloon, while Skoda, the Czech carmaker, expects to launch its Felicia model by the end of this year. The Skoda models will at first be imported as semi-knocked down kits. However, the company has ambitious plans to raise output from about 100 cars in this year to 60,000 units a year by 2000. Audi has more modest aims for its executive model. Initial production plans for the A6, which will cost about Rs700,000 (\$20,468), envisage output of 6,000 units a year.

Industry Stuff, London

Greeks to market Tirana centre

DTZ Mihalos of Greece, part of an international consortium of property consultants, has been appointed to market the World Trade Center in Tirana, the Albanian capital. The development by Di Vincenzo Estero of Italy is claimed to be

the first large-scale commercial office project in the city.

The 30,000 sq metres development has been designed to cater for companies seeking to establish in Albania. It will be linked to a network database linking more than 300 World Trade Centres in other countries and provide occupants with market information, advice on importing/exporting as well as secretarial and translation service

The first accommodation is due to be completed by early 998.

Andrew Taylor, Construction Correspond

■ An Anglo-Malaysian joint venture will manage the construction of £75m of new facilities, including south-east Asia's largest covered car park, at Sepang's new international airport south of Kuala Lumpur, Malaysia. The contract has been awarded to SSP-TBV, a joint venture between the project management arm of Tarmac, the UK contractor, and Sepakat Setia Perunding, Malaysian consulting engineers. The new international airport due to open in 1998 in time for the Commonwealth Games will cater initially for 25m passe year, rising eventually to 80m.

■ Three Swedish companies, Tele6, Telenordia and Banverket, and Danish telecommunications group Tele Danmark will work on a new undersea fibre optic telephone cable link between Denmark and Sweden. The project, due for completion in October 1996, involves sinking a cable with capacity for 30,000 telephone calls between Elsinore, north of Copenhagen and Halsingborg across the narrow straits separating the two countries. Reuter, Copenhagen

US and Japan agree truce on aviation rights

By Gerard Baker in Tokyo

Japan and the US yesterday agreed to a temporary truce in their dispute over passenger aviation rights between the

Negotiators from the two sides settled on a short-term settlement "to avoid a bettle of imposing sanctions on each other during the high summer

Japan's senior negotiator at the talks in Washington. The discussions failed to bridge the substantive gap over how to begin reviewing the passeng section of their 40-year-old pilateral aviation treaty.

Further talks aimed at reach-

ing a lasting settlement are scheduled in Tokyo for June 3 and 4. Under the terms of the truce

approve outstanding requests by airlines for new flights that have been deferred because of the dispute

The US will allow Japan Airlines (JAL) to operate three weekly flights between Tokyo and Kona, Hawaii, from tomorrow until October 26. JAL will also be permitted a rise in the number of flights from Sendai to Honolulu from three to season," said Mr Jhu Hanyu, both sides will tamporarily seven weekly for a five-week

period beginning tomorrow. In return, Japan will allow United Airlines to double its weekly flight frequency between Los Angeles and Tokyo from the current seven to fourteen for the same fiveweek period, and to fly seven weekly flights from Kansai International Airport in Osaka

to Seoul until October 26. Mr Hanyu, counsellor for international aviation at the

transport ministry, said the period of only five weeks for the Sendai-Honolulu and Tokyo-Los Angeles operations represented a form of "hostage-taking", to ensure both sides lived up to commitments made for resuming talks next month.

At those discussions the two countries will again try to settle their long-standing dispute, which centres on differing

bilateral treaty. The main question is one of "beyond rights" - whereby US airlines are allowed to pick up passen-gers in Japan and fly them on to destinations in Asia.

Japan claims the treaty allows such rights only as secondary to the main US-Japan traffic. But a significant proportion of the US airlines' pas-sengers in Asia now originate

Soap smugglers clean up at Lever Brothers' expense

High tariffs create opportunities for illegal trade, but multinational consumer groups still see prospects for investment in Pakistan

ree trade is a wonderful thing, but not when smugglers are the bene-ficiaries at the expense of legitimate busines

So say Pakistani companies such as Lever Brothers Pakistan, part of the Anglo-Dutch Unilever group, which face fierce competition from illegal traffic in consumer goods. By evading import duties and taxes, smugglers can offer goods at very competitive prices and sharply reduce the sales and profits of local manufacturers.

The lawlessness in neighbouring Afghanistan and in the tribal areas on the Pakistant side of the frontier has made life particularly easy for the smugglers, who trade in everything from cars and fertiliser to tea bags and soap.

Alghanistan is in effect a duty-free zone, and the abuse of transit trade arrangements, whereby goods supposedly des-tined for Afghanistan have been imported through Karachi and eventually diverted back to the Pakistani market, has exacerbated the problem. Take Lux soap, a Unilever

brand so universally popular that it can be traded almost like a commodity. A trader can buy a tonne of Lux soap bars in, say, Dubai, Hong Kong or Singapore for about \$1,600, equivalent to Rs57,000; the simingular's additional costs for transport, finance and bribing gunmen at roadblocks proba-bly amount to about Rs20,000, making his total cost about Rs77.000 a tonne.

To make the same Lux soap in Pakistan, Lever Brothers says it spends about Rs54,000 a tonne. So far so good. But it must also pay an additional Rs37,000 in import duties for its raw materials, sales tax and excise duty, and it spends Rs4,000 a tonne advertising the brand. That brings its total costs to Rs95,000 a tonne. It is not hard to see why smuggling is profitable.

Soap smuggling has eased because the Pakistani government has put a stop to the Afghan transit trade for many categories of imports. But Lever now faces a smuggling problem with another of its products - tea, which is also



eeper displays smuggled soft drink cans which carry a higher profit margin than Pepsi produced under

subject to heavy taxes. "Every one of our products is carrying a huge duty burden," says Mr Anthony Crouch, commercial director of Lever Brothers Pakistan

Both Pakistani and foreign business executives say the problem is not just the existence of smugglers, but the fact that the incentives for them to smuggle are so high. The tax burden on legitimate

companies, they say, is much too heavy because governments look at industry more as a source of revenue than of growth and employment The import tariff regime is

not organised as it should be to impose low tariffs on raw materials and high ones on finished goods that compete with

local manufacturers. Pakistani industrialists also complain that their companies are taxed because they are easy to tax, while the wealthy landowners still pay almost nothing because agriculture is largely exempt from taxation - and because most politicians are landowners.

Although the government of Ms Benazir Bhutto is taking tentative steps to broaden the tax base and is moving towards a reduction of import tariffs in line with international trade agreements, it is likely to be several years before industry finds its tax burden greatly lightened.

In the meantime, companies such as Unilever have not

confident this large consumer market - with a population of 130m - will continue to grow. Unilever is planning to invest Rs1.5bn in expanding its food interests, especially ice cream and processed vegetables. It is also in the throes of

rationalisation. A merger is planned between Lever Brothers, in which Unilever has a 70 per cent stake, and Brooke Bond Pakistan, where Unilever has 40 per cent, to create a new company called Unilever Pakistan. The Unilever parent brought

Brooke Bond International in 1984 and the Pakistan merger would be the last of a series of similar deals that have taken place in India, Sri Lanka and

Mr Crouch says there are three motives for the merger. savings from economies of scale; ending competition tween two Unilever brands of tea (Lipton tea is sold by Lever); and the creation of a Pakistani group strong enough to implement Unilever's ambitious programme for increasing its presence in the processed food market.

Lever launched Wall's ice cream in Pakistan only a year ago and, encouraged by the response of consumers, is eager to expand.

It also wants to move into tomato products, such as ketchup, and chilled vegetables for the growing number of urban shoppers. There is a plentiful supply of good quality local produce, but distribution is poor. In four or five years, the company is likely to look at making prepared meat prod-

Pakistan, in short, is moving towards a modern consumer society. At present, most of the ice cream consumed is unbranded "kulfi" made by local artisans, and most people wash their clothes using semiindustrial bar soap rather than the kind of washing powders made by Unilever.

But products such as Lux and Wall's ice cream are making inroads. And there is one good thing about ice cream; it has to be kept cold, which makes it hard to smuggle.

Victor Mallet



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entirely squashed when the OSCE organised a conference out to be effective.

World football body faces TV rights row

By Jimmy Burns

THE leadership of Fifa, world football's governing body, is facing a potential boardroom revolt over its controversial handling of future World Cup marketing and television

European members of Fifa's executive committee are plan-ning to try to force Mr Joseph Blatter, the organisation's general secretary, and Mr Joao Havelange, his Brazilian president, into making the contracts part of an open and transparent bidding process at a meeting scheduled for the end of the month.

Mr Blatter was hoping the committee would accept unconditionally his interim report on the negotiations. But it emerged yesterday that Fifa's powerful European lobby will reject it unless he convinces them that negotiations on the contracts are being conducted in a fair and open man-

The warning was issued yes-terday on behalf of the EU's nine members by Mr David Will, Fifa's Scottish vice-president, after two leading sports companies claimed they were being deliberately excluded

the contracts in contravention of earlier public assurances that there would be an open bidding process.

The growing row over the contracts in recent weeks has included critical statements of the Fifa leadership by two other executive members: Mr Jack Warner, president of the American footballing confederation, and Mr Chung Mong-Joon, the South Korean vice-president of Fifa.

Yesterday, Mr Will said: "This is an issue that European committee members feel very strongly about. There should be an open marketing bid and each bid should be judged on its merit." He added:
"I am obviously concerned and
want to know what's going

Mr Will is a close ally of Mr Lennart Johansson, the presi-dent of Uefa, Fifa's counterpart in Europe, who is hoping to succeed Mr Havelange as president of Fifa.

He was speaking after it emerged that Mr Mark McCormack had protested to Mr Blatter about the way his initial bid for the television contracts for the World Cup in 2002 had

Mr Blatter, a copy of which has been made available to the Financial Times, Mr Eric Drossort, the vice president of Mr McCormack's International Management Group, claims that "preferential treatment" is being given to Flia's long-term marketing agent ISL, and the European Broadcasting Unionled consortium which already

World Cup Whilst I welcome the apparent invitation from Fifa to be involved in the bill process for World Cup rights, there are glaring inconsistencies con-cerning the basis on which the rights are being made available...It is difficult to believe that Fifa genuinely wish to consider our offer on a prop-erly competitive basis," Mr Drossart states.

IMG's move follows a similar protest from Team, the Lucerne-based marketing arm for the Champions League run by Uefa, and within days of confirmation that Mr Rupert Murdoch's News Corporation was considering making a multi-billion dollar bid for the world broadcasting rights for the 2002 and 2006 World Cups. Within Fifa's executive com-

has the TV rights for the 1998



Havelange: urged to make bidding process open and fair

mittee, there is growing concern that Mr Blatter, with the tacit endorsement of Mr Havelange, is reneging on a promise of an open bidding process made to committee members in

Mr Blatter has told committee members that he is continuing negotiations with ISL and the EBU-led consortium even though an option on exclusive negotiation rights for the two groups expired at the The executive committee has

been seeking to reform Fifa's leadership structure. Fifa headquarters were

closed vesterday because of May Day. But last month Mr Blatter wrote to IMG and Team saying that, while it was contimulag negotiations with ISL and the EBU-led consortium, it was inviting proposals from uther "interested parties" on the basis of minimum conditions for the 2002 and 2006

world cups by May 15. Both Team and LMG are claiming that the deadline they have been given and the unclear way in which the minimum conditions have been laid out have put them at a huge disadvantage in a serious bidPact will have little effect, say abolition groups

UN edges close to accord on landmine restriction

Per 100,000 inhabitants'

400 ----

Molander of Sweden, chairman

of the negotiations, said yester-day that it would nevertheless,

if applied, save "many, many

the wording on mine exports which, western diplomats spec-

ulated, reflects its wish to con-

tinue supplying Kashmiri sepa-

ratist groups in India. But it

has not indicated whether it

plans to block the necessary

consensus of the 55 parties

needed to amend the 1980

The draft ready for approval tomorrow would probibit the

Pakistan is unhappy with

By Frances Williams in Geneva Ampurtoes

Negotiators said yesterday they hoped a United Nations pact to restrict the use of antipersonnel landmines would be agreed tomorrow, despite lastminute objections by Pakistan.

The accord, designed to strengthen a 1980 UN convention on inhumane weapons, will bar or limit the use of certain kinds of mine. But it will fall far short of the outright ban now being urged by many humanitarian organisations and more than 30 governments, the latest being Australia. Germany and Britain.

Groups campaigning for abolition say the accord will have little impact on the huge toll of civilians killed or maimed by mines, put at 20,000 a year. The UN estimates that some 110m mines have been laid in 64 countries, among the worst offected being Cambodia. Angola, Somalia, Mozambique and Afghanistan,

However, many countries, including China. Russia and India, say they still bave a military need for mines to defend

Admitting that the accord was a modest step. Mr Johan

use of non-detectable anti-per mines to be self-destructing and self-deactivating except in guarded fenced-off minefields.

However, to the anger of humanitarian groups, this requirement would not come into force for nine years - a delay insisted on by countries with large stockpiles of non-de-tectable mines.

The groups also argue that self-destruct and deactivation devices are inherently unreliable, though the draft treaty mines should still function

after 120 days. In addition, the revised treaty would ban the export and transfer of prohibited mines from the date of entry into force, though countries have agreed to make this oper-ative immediately. About two dozen states, recently joined by China, are currently observing a UN moratorium on all or

some mine exports, The treaty would also extend the convention to internal conflicts, put the responsibility for clearing mines on those laying them, and make violations of defined in international law.



Shifting sands of influence in central Asia

Gillian Tett reports on a new role for an old cold war institution

r Kandil Karlmov, a shrunken Tajik peas-ant, stood by his partly ruined house in despair. My neighbour will kill ma he has already taken half my land," he said, gesturing at the muddy patch where his prized pomegranate trees were recently cut down by a fellow

villager. Three years ago some 75,000 Tajiks fied to Alghanistan after a bloody civil war. Though many, like Mr Karlmov, have returned, some have been

killed and others harassed. Now Mr Karimov has an unlikely champion. Earlier this year the Organisation for Security and Co-operation in Europe asked the local Tajik authorities for a legal review of

Whether Mr Karimov will win is unclear. But far more is at stake then the pomegranate

For the OSCE's presence is one sign of a broader shift now under way in the west's involvement in this geo-politically sensitive corner of the former Soviet Union.

In recent months the OSCE has been attempting to re-invent its role. The experiment is still in its early stages. But some diplomats are already wondering if the OSCE, rather than the UN, might be the group best equipped to serve the west in attempts to contain the region's turbulence.

When the OSCE was set up in 1953, it was billed as a conference on military security between the communist bloc and the west. But the collapse of the Soviet Union in 1991 meant that, because it was deprived of its traditional role as a buffer in Europe, some diplomats suspected it would

simply fade away. In late 1994, however, it made a last-ditch attempt at renaissance. It changed its name - from the Conference for Security and Co-operation and announced that it intended to spread democratic values and act as an "early warning"

system for ethnic conflict. Some western diplomats remained cynical. With a budget of \$30.6m, it has limited resources. And its cold war tradition of giving an equal voice to all members - however shocking their human rights record - fuelled suspicions

says: "The OSCE has usually been so careful not to offend governments that it barely has

This scepticism was not

on regional security in Uzbekistan and the Tajik capital Dushanbe last week. Although Mr Gancho Ganchev, the OSCE representative in Tajikisian, criticised Tajikistan's demo-cratic record, the language remained polite - and neither the Tajiks or Uzbeks showed much sign of taking westernstyle human rights values to

Nevertheless, this public diplomacy is misleading. For the real test of the group's work - and future - now lies not in the bland conferences. but its new self-appointed

One sign of this has been the OSCE's appointment - on a US initiative - as a monitor for elections in Bosnia, However, a from the UN High Commissioner for Refugees that the OSCE take over its work in

Since the UNHCR left the republic last year, the OSCE is now running three field sta-tions which seek to uphold human rights and encourage peace, partly by taking up dis-putes such as Mr Karimov's.

These operations have been surprisingly effective so far. Indeed the factor that has sometimes been the OSCE's greatest weakness - its principle of consensus - has given it an important advantage. For the fact that the Tajik government is itself a membe OSCE has allowed OSCE offi-cers considerable leverage over local Tajik officials.

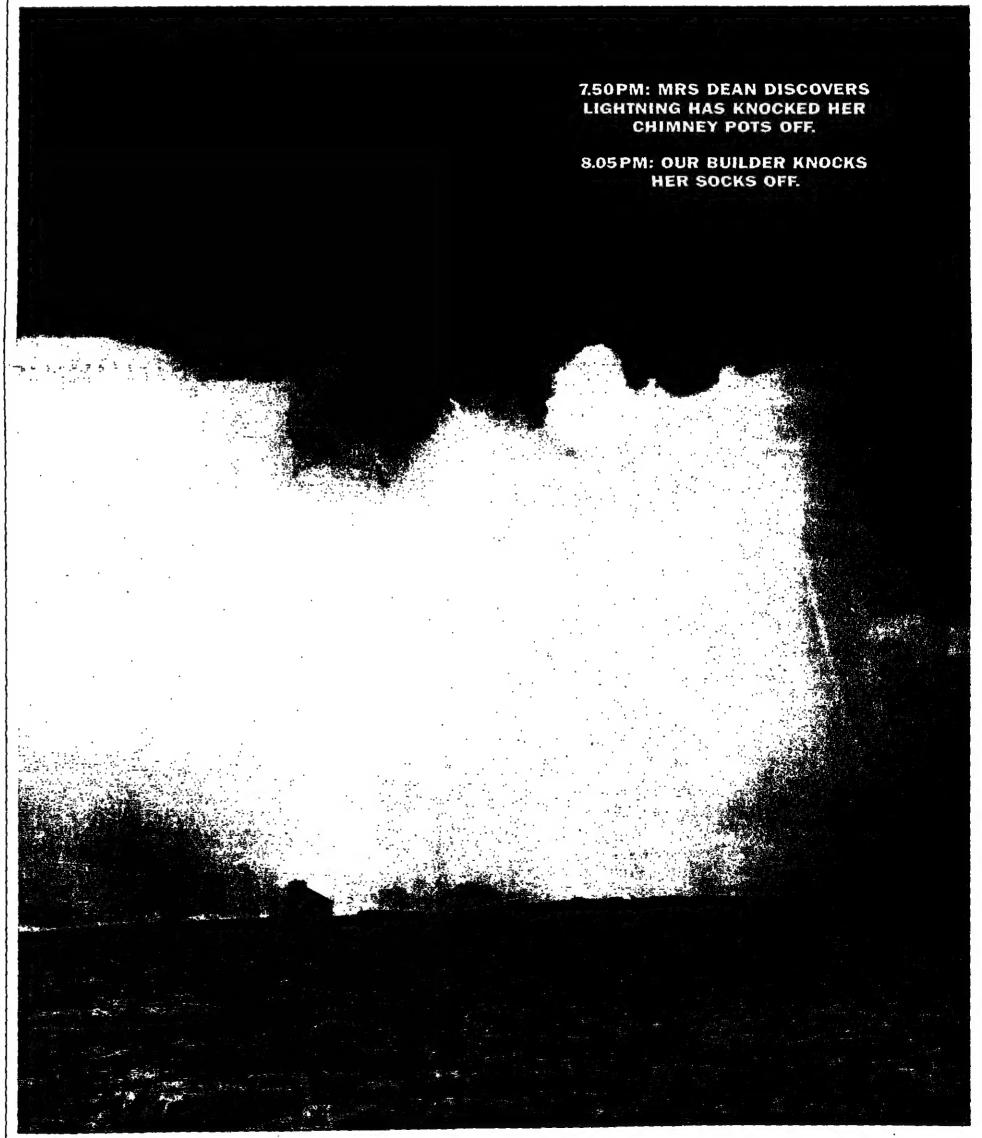
f the experiment is successful, some officials hope the Lgroup could move into

other UN-type work in the future. Meanwhile, continued skirmishes along the Tajik-Alghan border are casting doubts on the role of Tajikistan's UN military observers, who are reported to be costing some

OSCE officials insist that the organisation is still a long way from assuming any direct role as military observer. However, if the Tajik and Bosnian operations prove successful, the possibility might move on

to the agenda. Few western diplomats want to allow Russia an entirely free hand in the region. But equally few have any faith in the effectiveness of an over-stretched and disillusioned UN as

regional policeman. And with Tajikistan likely to remain turbulent for many years, it it not simply Mr Karimov who has reason to hope that the OSCE's mission turns



Who says lightning never strikes the same place twice? Earlier this year a builder retained by Guardian Direct performed a spirited impression of grease lighming when he arrived at a cottage, which had been damaged in a fnunderstorm, only lifteen minutes after the incident was reported.

The amazed owners, who had only signed up with us five days earlier, were delighted when we agreed their claim on the spot, paying all the bills direct. Proof, if proof were needed, that we'll always try to settle your claim in a flash. BETTER INSURANCE FOR THE WORLDLY WISE

M Guardian Guardian Royal Exchange Group

China police halt

May Day protest

demonstration yesterday and detained several people after

Beijing vendors protested at alleged seizure of their goods.

demonstrating outside the market and at government and

had been locked out since. Vendors blamed the market's

management for the seizure. Appeals to police had met with

no response. "Today is Labour Day. They are very angry and

The stallholders said they had invested their savings to build

stalls there for 12 years, but had been told to leave after only

one. Unauthorised demonstrations are illegal in China, and

police usually clamp down quickly on any signs of labour

the Baiyun Clothing Wholesale Market, expecting to keep

More than 12 police grabbed protesters and pushed onlookers

away from the demonstration outside a market in east Beijing.

Over 150 clothes vendors had had all their stock seized, and

Chinese police broke up an International Labour Day

Stallholders said more than 100 vendors had been

police offices elsewhere in the capital.

they need jobs," another protester said.

and the second section in the

Japan's vehicle sales fall in April

By Gerard Baker in Tokyo

New vehicle sales in Japan fell in April for the second straight month, according to figures published by the Japan Auto-mobile Dealers' Association yesterday. Registrations of new vehicles dropped 0.1 per cent

on a year earlier to 374,405. The main reason for the fall was a big drop in sales of commercial vehicles. Trucks declined 2.6 per cent to 118,182 units, while buses fell 18.3 per cent to 1,593 units.

A slight rise of 1.2 per cent in sales of passenger vehicles to 254,630 units was not enough to offset the commercial side's

Once again, the figures showed the growing Japanese taste for large, imported cars. Of the total, foreign-made vehicles made up 9 per cent, at 33,042, a jump of 23.7 per cent

from a year before. Of the leading Japanese car makers, only two, Honda and Suzuki, reported sales growth. Toyota, the largest, saw new registrations drop 4.9 per cent; Mazda, now controlled by Ford of the US, reported a 0.1 per cent decline. The biggest fall was registered by Isuzu, whose

sales dropped 42.9 per cent. Car and truck sales had been rising steadily since reaching their low point in the current cycle in the summer of 1994. An association official played down fears of a stalling recovery. "We cannot tell whether the upward trend until February has changed or not without seeing sales figures for one more month," he said.

 Japan's foreign exchange reserves reached another global record of \$205.7bn last month, the finance ministry said yesterday. The monthly increase of \$1.7bn was the thirtieth straight rise, bringing total reserves to a record high for the fifteenth consecutive

But the increase in April was considerably below the average monthly rise in the past two years, reflecting somewhat subdued intervention in foreign currency markets by the Bank of Japan.

US rejects India, China funds claim

By Edward Luce in Manila

The US yesterday rejected demands by China and India that they be made eligible for the Asian Development Bank's soft-loan window which extends subsidised loans to poorer Asian nations.

Despite being technically eligible for loans from the Asian Development Fund, the two countries have been excluded due to a shortage of donor funds, largely the consequence of arrears run up by the US. East Asian members are reluc-

tant to raise their share to cover the shortfall and without an accord by donors to replenish its coffers, the ADF looks likely to run dry this year.

The US, which is in arrears of \$337m to the ADF fund of \$4.2bn agreed in 1992, rebuffed the demands of China and India, saying the funds should be directed to smaller economies such as Cambodia.

"I do not believe China and India should participate in the ADF," Mr Jeffrey Shafer, US Treasury under-secretary, said yesterday. "The US thinks the

available to those countries that do not have the ability to tap capital markets."

But China and India, which are both entitled to the World Bank's soft-loan funding through the International Development Association, said their exclusion was unmerited.

US reluctance to honour its debts to the ADF, owing mainly to congressional opposition to foreign aid spending, had led to the exclusion of China and India, diplomats said. "We call on the internato back our efforts in poverty alleviation, by making ADF resources available to China." Mr Yin Jieyan, head of the Chinese delegation, said.

The US delegation yesterday failed to produce specific pledges on the clearing of its arrears to the ADF before the fund runs out at the end of this year. Other donors, notably leading European countries, said they would not contribute to ADF replenishment before the US paid its debts.

Mr Shafer said the ADB

resources of the ADF should be tional community and the ADB should direct money from net earnings on its market-based loans to boost the next ADF. Bank officials say they would be unwilling to siphon off more than about \$100m from the ADB's capital flow, which is unlikely to make a real differ-

ence to the replenishment. Mr Shafer said the Clinton administration would try to persuade Congress it was to the country's commercial advantage to pay the arrears, due to the benefits of "reflows" to the US from ADF procure-

special Asia bond eases fears on economy

7.0 ~

By Ted Bardacke

Thailand's inflation rate has registered its first steep decline in more than a year, with con-sumer prices in April just 6.9 per cent higher than a year earlier, the Ministry of Com-

merce said yesterday. Until April's decline in the inflation rate, Thai consumer prices had risen at an annual rate of more than 7 per cent for four straight months. This has fuelled worries that the government's attempts to slow the economy were failing and forcing the central bank to keep interest rates high.

The decline in the inflation rate reinforces other indicators showing a cooling of the economy – private investment, manufacturing activity and commercial credit growth have all declined throughout 1996. However, analysts do not Thailand inflation Annual % change in CPI for fresh fruit and vegetables, indicating that the effects of last year's record flooding throughout the country may finally be receding.

The rate of wholesale price

rises fell further - up 6.2 per cent in April from the same month last year, compared with annual rates of 6.7 per cent in March and 7.2 per cent a year ago. Yet as fears recede on the

cost side, new concerns are

emerging on the demand side. until the latter half of the year. as the central bank is likely to wait for several months of decline before making a poten-April's inflation rate is still significantly higher than the central bank's overall annual

Thai labour unions used yesterday's May Day holiday to submit demands for a 15 per cent increase in the minimum wage, which now stands at Bt145 (\$5.70), up from Bt135 last year. A committee made up of representatives of gov-ernment, labour and employers will decide on the amount of target of 4.9 per cent for 1996.

Food warning for Asian nations Asia, already home to over 500m malnourished people, will Last month's decline in inflahave a harder time finding food as many countries focus on tion was led by falling prices industrial growth instead of agriculture, non-governmental

groups said yesterday. At a two-day meeting to draft a regional platform ahead of the World Food Summit in November, Mr Obaidullah Khan, regional representative for the UN Food and Agriculture Organisation, said that while global agricultural output was keeping up with population growth, the distribution was not equal; poorer countries were not receiving their share.

"The FAO projects that through 2010 food production will grow but at a much slower pace. The food security situation will be more fragile than before. Many self-sufficient countries will become food importers. As lower-income nations are forced to buy more food from abroad, they will have a harder time paying food bills." Reuter, Bangkok

Indian state governor quits

Mr Shiv Shanker, governor of the south Indian state of Kerela, resigned yesterday, following allegations of corruption against him by India's top government lawyer. Mr Dipankar Gupta, solicitor-general, told the Supreme Court charges were ready to be laid against Mr Shankar and Mr Motila Vora, governor of Uttar Pradesh, both senior members of Prime Minister P V Narasimha Rao's Congress Party, the Press Trust of India (PTI) reported.

"Investigations against both these persons are complete and the only impediment in proceeding further to file substantial charge sheets against them is the immunity enjoyed by them under Article 361 of the Constitution," Mr Gupta said.

Mr Shankar faxed his resignation to President Shankar Dayal Sharma saying he was innocent and would fight to clear his name, PTI said. Mr Vora said in Lucknow he was not . aware of any moves against him in Delhi. India is in the midst of general elections. Mr Vora and Mr Shankar were both appointed to their positions by Mr Rao. Reuter, Delhi

HK talks tough to Beijing

The British colonial administration in Hong Kong will refuse to co-operate with a legislature Beijing plans to install in the territory, Ms Anson Chan, the island's chief secretary, said yesterday. She had told China's top official on Hong Kong affairs that the administration would not help the provisional appointed legislature Beijing wants to install when the territory reverts to Chinese sovereignty in July 1997.

"The clear and consistent position of the Hong Kong and British governments is that such a body is neither necessary nor desirable," Mrs Chan told the Hong Kong Legislative Council, which Beijing has promised to scrap. The British side maintains Hong Kong lawmakers elected last September should serve their full four-year term until 1999. But Beiling

HK call to back | Thai inflation rate fall clearing network

By Louise Lucas in Hong Kong

The Hong Kong Monetary Authority yesterday urged the Asian Development Bank to back proposals for an Asia-specific network of bond clearing and settlement systems, as a means to enhance the appeal of the region's financial markets to domestic and overseas

A robust bond market is seen as pivotal to the region's enormous investment demand. Projections by the ADB show Asia needs US\$280bn a year to fund infrastructure needs, or more than \$1,000bn to the year 2000. A big shortfall exists between this and available funds, desuite the region's high savings rate of over 30 per cent and substantial official reserves, estimated at \$600bn or 40 per cent of world total.

At the 29th annual meeting of the board of governors of the ADB in Asia, Mr Joseph Yam, the Hong Kong Monetary Authority's chief executive, drew a parallel with Euroclear, set up to fecilitate book-entry clearing and settlement of eurodollar bond transactions, helping to spur the eurodollar bond market in 1968,

"An AsiaClear system to clear Asian and international bonds in the Asian time zone with reduced settlement risk is now a distinct possibility," he said. "Payment systems could

similarly be linked as a network, hopefully on real time. Asian financial markets would become a lot more attractive to investors in and outside this

The Asian bond markets are reckoned at \$338bn, or 2 per cent of comparable OECD bond markets. Efforts to stimulate the market have taken various forms: banks sought to create a "dragon bond" market, but this Asian-originated and distributed paper largely ended up with central banks. Governments such as Hong Kong have sought to develop benchmarks and install debt securities

While the idea of a regional bond clearing system has been mooted in the past, it was initially seen as a centralised system; fears of bureaucratic and commercial hurdles meant it never gained ground. Now, Mr Yam said, domestic bond clearing systems and tele-

coms technology have developed to a point where Asia can have its own regional system rather than a centralised one. An AsiaClear system would make resource mobilisation through financial intermedia-

tion more effective, he said. "The ADB, as the region's premier financial institution and bond issuer, should explore and support the development of AsiaClear and other financial infrastructural networks."

In Baden-Württemberg, we know all about bull markets.

Sri Lanka growth at 5.5%

1995

tially expansionary move.

By Amai Jayasinghe in Colombo

Foreign investor interest in Sri Lanka fell sharply last year because of the Mexican crisis and the domestic drag of the Tamil separatist war, but buoyant export demand still allowed the economy to grow by 5.5 per cent, the Central Bank said yesterday.

In a preliminary review of living standard in South Asia. the economy, the bank said the country needed to attract more foreign and local private capital. The government's privatisation programme should be accelerated in a bid to achieve non-inflationary growth.

"There is an urgent need to increase the rate of capital formation, without which the country could weaken its past achievements in human development," the bank said. Estimated GDP growth rate

was marginally lower than the 5.6 per cent achieved in 1994, but per capita income rose from \$656 to \$713 last year, giving Sri Lanka the highest the projected 7.7 per cent.

The bank said the country's moderate growth was led by exports; which benefited from a 7.5 per cent depreciation of the Sri Lankan rupee against the US dollar and favourable prices for the country's main export commodity, tea.

The budget deficit was 8.4 per cent of GDP against 10 per cent in 1994; the balance of payments current account deficit narrowed to 4.2 per cent of GDP from 6.5 per cent. The fig-ures were better than forecast by private analysts, but the 11.5 per cent inflation rate at the end of 1995 was worse than

Seoul fights burden of bad loans

S Korea wishes to avoid a Japan-style bank crisis, writes John Burton

outh Korea is viewing with alarm the banking Crisis in Japan, fearing its own banking system may be engulfed by similar trou-

Seoul now appears set on cleaning up the balance sheets of the nation's 25 commercial banks as Korea prepares to join the Organisation for Eco-nomic Co-operation and Development this year.

Failure to do so could threaten the stability of the banking industry when it faces increased competition due to the wider market access under OECD guidelines.

In the past week, Seoul has introduced measures to rescue the banks from years of poor earnings and the burden of bad loans. The new banking policy includes easing restrictions on bank loans to the hig industrial groups, or chaebol. The bank credit limits were meant to curb the economic dominance of the chaebol, but instead it left banks with a growing dependence on the risky small business sector. which is suffering a record

number of bankruptcies. .. The government also cut the reserve requirement ratio, which is the average proportion of total deposits banks must place as reserves with the central bank, in an effort to boost bank profits.

This followed a 18 per cent fall in combined net earnings to Won998bn (\$1.28bn) last year as the sluggish performance of the Seoul bourse led to a sharp drop in securities-trading gains, which had become a main source of income for the

Some of the country's leading banks would have gone into the red last year if the government had not decided to reduce their required reserves for stock investment losses to 30 per cent from 100 per cent.

ever, can not disguise the fundamental structural weaknesses of the banking system. The main problem is the

They were forced by the gov-

ernment to provide low-inter-

Such accounting tricks, howlarge amount of dud industrial loans that the banks have accumulated in the last decade.

lem could be easily solved if

South Korean banks: cleaning up the balance sheet



The president of South Korea's largest commercial bank has been arrested for alleg-edly accepting kickbacks in return for providing loans to an ailing construction company, writes John Burton.
The case illustrates how strict government

restrictions on bank lending have resulted in companies bribing bank officials to obtain credit. Mr Rhee Chul-so, the president of Korea First Bank, was arrested early yesterday morning for allegedly receiving Won250m in bribes

for providing Won113hn in loans to the Hyosan construction group in 1993 and 1994. Hyosan had been unable to obtain bank loans for the construction of tourist facilities because of a law banning credit for such projects unless they are located in government designated tourist

Prosecutors alleged that Mr Chang Jang-son, the Hyosan chairman, paid Mr Rhee to acquire capital for the construction of a ski resort and condominiums and the purchase of two hotels.

est capital to strategic induscases failed to repaid the loans. Combined non-performing loans for the 25 banks amounted to Won2,300bn last year, or 0.09 per cent of total lending, according to the Office of Bank Supervision.

But most analysts believe the actual figure is close to Won10,000bn since many troubled loans, mostly related to the state-directed rescue of the troubled shipbuilding and construction industries in the mid-1980s, are not counted in the government's estimate of bad

In spite of their troubles a decade ago, the chaebol remain the most creditworthy borrowers in Korea. But the banks have been under state pressure to lend to the underdeveloped small business sector, while curbing loans to the conglomerates. Chaebol loans accounted for only 13.9 per cent of total bank lending last

"Korean banks are a potential disaster area, but the probthe government stopped interfering and allowed the banks to lend to strong corporate borrowers instead of propping upshakey small companies," said Mr John Wadle, a analyst for J.P. Morgan Securities in Hong

Kong. Officials have now come to same conclusion. In an attempt to strike a balance between small and large corporate borrowers, the government last week announced that its previous policy of limiting bank credits to the 30 largest chaebol will only be applied to the 10 biggest groups from June.

However, the banks still face a challenge attracting business from the large industrial groups. They are increasingly relying on direct financing from the stock and bond markets and borrowing abroad, where interest rates are much lower than in Korea. The governments's decision

to cut the reserve requirement is expected to add Won300bn to bank profits this year. But the measure is also a mixed blessing since it is expected to lower interest rates that threatened

to squeeze lending margins. In addition, the central bank is phasing out low interest policy loans to commercial banks that enabled them to reap healthy interest margins when lending to small businesses. The banks are hoping that

lower interest rates will result

in higher loan volumes that will guarantee continued growth in interest income, up 28 per cent last year. The next likely stage in the government's programme to rehabilitate the hanking sector

is to encourage mergers that would lead to cuts in their bloated workforce and improve their mainly inefficient operations.

Mr Rha Woong bae, the deputy prime minister for economic affairs, revealed this week that the government will soon propose tax incentives and other financial aid to

encourage such mergers. Bigger banks and other financial organisations would be better able to cope with changing market conditions resulting from financial liber-

German standards. The wealth of blue-chip corporations based in Baden-Württemberg includes names that any state would be proud to call its own. The close ties between bank and state make for effective synergies. Baden-Württemberg is

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Baden-Württemberg, an economic

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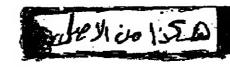
the force that underpins the high credit quality, well known around the financial world. In return, as state development agency, L-Bank assists the state with its public sector commitments - targeted infrastructural improvements, promotion of trade and industry; funding for residential con-

And bear markets, too, come to that. In turbulent times, L-Bank's credit

quality and liquidity forge firm foundations for innovative issues.

tion of agriculture, of course. Which brings us back to those bull markets. L-Bank, Schlossplatz 10/12, D-76113 Karlsruhe, Germany. Telephone INT 721/150-0.

struction programs and family support, to name but a few. Oh, and the promo- Landeskreditbank Baden-Wurtlemberg



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FS THURSDAY MAY

Day protes Deputy PM

of Canada resigns pos resigns post

By Bernard Simon in Toronto

Control to be seen to Ms Sheila Copps, Canada's deputy prime minister, resigned her cabinet post and parliamentary seat yesterday after a week of unrelenting public pressure to honour an election pledge to quit if the government failed to replace the Goods and Services Tax.

The 7 per cent GST was introduced by the former Progressive Conservative government in January 1991 as part of wide-ranging tax reforms.

While it was generally welcomed by the business community, the GST has turned out to be a headache for politicians of

Consumers' dislike of the GST, which replaced a less visible manufacturers sales tax. contributed to the downfall of the Conservatives in the 1993

The Liberals' election manifesto included a pledge to replace the GST with a "fairer"

Ms Copps, who is also the heritage minister in charge of cultural policy, vowed in the run-up to the 1993 general election that she would resign if her party failed to replace the unpopular value added tax.

However, numerous efforts to find an alternative have

Mr Paul Martin, finance minister, finally acknowledged last week that, after examining at least 20 other options, the gov-erument made a mistake "in thinking we could bring in a completely different tax without undue economic distortion and within a reasonable time

Ms Copps, who has a reputation for being outspoken, ini-tially resisted calls to stick to her promise to resign.

She said last week that "when you're on the campaign trail, you get excited and sometimes you shoot from the hip". separatism.

fuelled public protests. The Globe and Mail newspaper reprinted her quotes every day this week on its editorial page under the headline "Resign". Ms Copps said yesterday that she would contest the forthcoming by-election in her

southern Ontario constituency. Another Liberal MP was ejected from the party caucus last week after voting against the federal budget on the grounds that it failed to take action on the GST.
Faced with the difficulty of

replacing the GST, the government has prodded the 10 provinces to blend their disparate sales taxes with it to create a uniform nationwide 15 per cent

Quebec has already harmon ised its sales tax with the GST, and Mr Martin announced last week that three small Atlantic provinces would come into the fold next year. The government has agreed to pay the three Atlantic provinces C\$1bn (US\$734m) over the next four years to compensate for lost revenues as they align their sales tax systems with the

But most other provinces remain wary of being tarred with the GST brush.

While the furore over Ms Copps' promise has embar-rassed the Liberals, her resignation is likely to contain the political damage to prime min-ister Jean Chrétien. Ms Copps' influence on overall government policy has been limited. despite her senior position in the cabinet.

However, the government's climbdown over the GST is an indication that the second half of the Liberals' five-year mandate is likely to be more turbulent than their first two years in office.

Mr Chrétien also faces other difficult issues, notably Quebec

Public pressure forces out Copps over reledge on Goods and Services Tax Mexico's workers march out of step

May Day shows up divide between party and unions, writes Leslie Crawford

ens of thousands of rebel trade unionists staged their traditional May Day parade yesterday - in deflance of Mexico's pro-government labour leadership, heralding a split in the Confedcration of Mexican Workers (CTM) which has sustained Mexico's ruling party for six

University lecturers and electricians, telephone workers and civil servants, pilots and bus drivers, marched past the empty balcony of the 16th cen-tury National Palace, where Mexican presidents once lorded over a ceremony that reaffirmed the labour movement's unswerving loyalty to the Institutional Revolutionary Party (PRI).

That loyalty is gone, shattered by the country's eco-nomic crisis and a labour leadership discredited by its close ties to the government.

For the second year in a row, Mr Fidol Velazquez, the 96--old patriarch who has led the CTM for more than half a century, decreed that the offcial labour movement would not march on May 1. Wishing to spare President Ernesto Zedillo the full blast of labour discontent, Mr Velazquez chose to stage a smaller, well-behaved event indoors, in which be and Mr Zedillo repeated the tired slogans of the 1910 Mexican Revolution.

There were no May Day marches last year, as most labour unions, reeling from the shock of the devaluation of the peso, chose to rally around "Don Fidel", as the Mexican patriarch is respectfully

At work in Mexico: the wage/inflation gap



Patriarchal union leader Fidel Velazquez:

Inflation

This year, however, Mexico's largest trade unions have bro-ken away from the CIM fold. With the recession continuing to bite into jobs and real wages, with pay settlements averaging only half the rate of inflation, the rebel unions believe it is time to end the labour movement's historic allegiance to the government.
The rebel unionists, led by

was joined by electricians, pilots, teachers, transport workers, social security unions, bank employees and some car industry unions. The Forum wants a new Labour Code to emancipate Mexico's labour movement from the tutelary authority of government. At present, all union elections must be

New Trade Unionism", which

shop. It wants to clean out corruption within its own unions, and abolish the ties of patronage which bond union bosses to the PRI government, Loyal rewarded with governorships. senate seats and lucrative government posts. And in the state sector, they grow rich by auctioning jobs and running their own private businesses,

With the recession continuing to bite into jobs and real wages, rebel unions believe it is time to end the labour movement's historic allegiance to the government

Mr Francisco Hernández Juarez, the telephone workers' leader, have been threatened with expulsion from the Labour Congress, an umbrella group which unites the CTM and smaller pro-government labour federations. Earlier this year, Mr Hernández Juárez dom of association, against the launched the "Forum for a present practice of the closed

endorsed by the labour ministry, while "independent" trade unions find it almost impossible to obtain official registration. The government also has the power to declare whether strikes are legal or not.

The Forum advocates free-

which are allowed to bid for public contracts.

"Mexico's labour movement was designed for a country which no longer exists," says Mr Hernández Juarez. "It is too subservient [to government], and too reliant on corporatist structures. We have to change

His decision to lead the May Day parade represents a de facto split within the Labour Congress, even if no formal expulsions take place. And although Mr Hernández Juárez denies it, it is only a question of time before he takes his followers into a new confederation that will rival the CTM.

A period of labour strife is expected to follow.
The most immediate consequence of a split in the labour movement will be a wave of strike action, as rival labour leaders wrestle for power," pre-dicts Mr Juan Millán, a CTM leader who was appointed sec-

The split worries the government, which has relied on Don Fidel to keep a lid on labour unrest in times of crisis.

retary-general of the PRI last

But Don Fidel's influence. health He has lost two important political battles this year. He failed to persuade the government to index wages to inflation, or to prevent price increases in basic foodstuffs. In April, when the minimum wage was raised by 12 per cent to 22 pesos (\$2.90) a day, government-controlled prices for increased by 30 and 27 per cent

respectively.

Don Fidel's refusal to designate an heir-apparent has comcounded the disarray in the labour movement. He is only due to step down in 1998, when his current six-year term expires. But his frequent hospitalisations have led many to believe he will die in office.

His departure one way or the other will create a vacuum in

the political system. "Don Fidel's immense moral authority has kept the labour movement together," Mr Millan says. "He is a phenomenon that will not be repeated."

Neither are there clear rules to chose Don Fidel's successor. a factor which will intensify the struggle for control over the CTM and its 5m members. In theory, three deputies, aged 83, 77 and 61, stand in the

line of succession, but they form part of the gerontocracy which is destined to expire with Don Fidel.

Mr Millan, who is considered the CTM's chief ideologist and is 53, says he is "too young" to

be considered for the job. The government is expected to play a mediating role in the succession, in the hope of perpetuating traditional arrange-

There are signs, however, that some unions are not prepared to be as docile as in the past. The teachers' union is threatening to strike in May. while a partial stoppage of road haulage operators, who transport 80 per cent of Mexico's internal trade and almost all overland exports to the US, began on Monday,

Elsewhere, the vociferous union of petrochemical workers is standing in the way of the privatisation of stateowned petrochemical plants, writing angry letters to every embassy in Mexico City to warn off foreign investors. Without the co-operation of task of introducing further eco-nomic reforms will be more of an uphill struggle for the gov-

Chile union confederation leadership row flares

By Imogen Mark in Santiago

May Day celebrations in Chile yesterday were overshadowed by a dispute between the Socialist and Christian Democrat contenders for the leadership of the CUT union con-

The Christian Democrats lost the presidency of the CUT executive committee last week after holding it for more than a decade, even though

their candidate, Ms Maria Rozas, won the largest number of delegates in the elections in mid-April.

Mr Roberto Algreon, the Socialist candidate, was elected instead with the support of Communist party dele-

Ms Rosas and the other Christian Democrat uniquists are now refusing to take part in the new executive unless there is an agreement at least

The outright winners in the new CUT are the Communists, who saw their share of the vote increase by almost 50 per cent to bring them in third with 13 seats, after the Socialists, with 15 seats, and the Christian

Democrats with 16. The Communists, who are outside the government coalition in which Christian Democrats and Socialists are the main partners, have been

gaining strength in the unions in the

past couple of years at the expense of the government parties.

workforce. However, it has a symbolic importance as a spokesman for They now control the two biggest

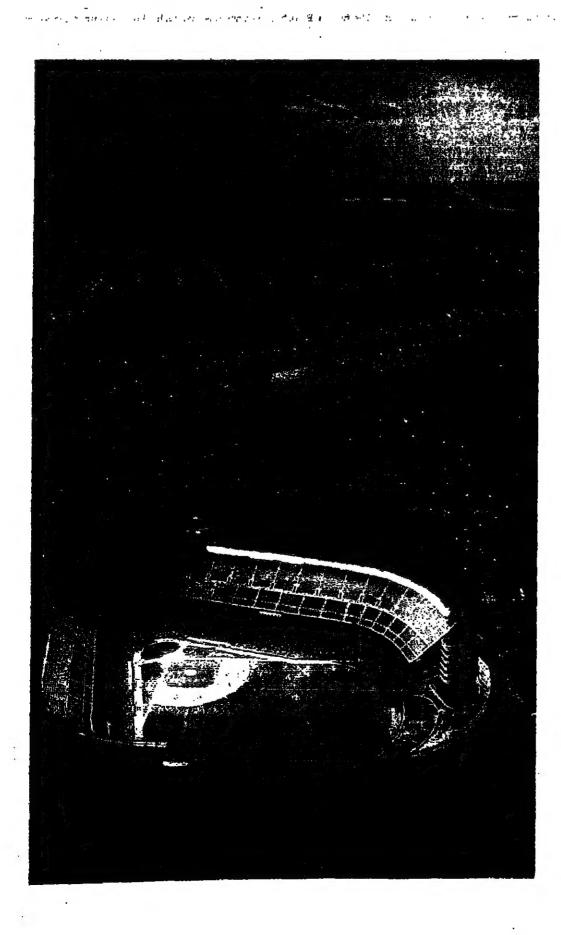
unions, the teachers and the public health workers, who are the mainstay of the CUT. For the government, it will mean a tougher relationship with a more

hostile labour organisation. The CUT represents only about half the unionised workforce, which in

turn is only 15 per cent of the 5m

the labour movement which the government until now has helped to

However, a sign of the new relationship came this week when the government announced it would not be consulting with the CUT, as it has always done before, on the annual increase of the minimum wage.



Can you light up the sky without clouding the air?

Natural pas - affordable safe and available - is an increasingly popular choice for driving turbines that generate electrical power all over the world. Although it

burns relatively cleanly, combustion does produce nitrogen oxide, implicated in acid rain. Abatement techniques have reduced emissions, but heightened awareness among the industrial nations continues to generate tighter legislative controls and the development of ecologically-sound power plants.

Conventional methods of controlling emissions are costly and dampen efficiency. However, ABB research has now developed a way to burn them off. It is a total solution, reducing pollutants while maintaining efficiency, thus consuming less fossil fuel ABB has installed its innovative "EV-burner" in the Midland Cogeneration Venture, a joint project to produce power for the Dow Chemical Company and the State of Michigan, USA. At full power load, this plant is now producing emission levels well below the world's most stringent requirements.

As a leader in electrical engineering for industry and transportation, and in the generation, transmission and distribution of power, ABB is committed to industrial and ecological efficiency worldwide. We transfer know-how across borders with ease. But in each country, ABB operations are local and flexible. That means we can help our customers respond swiftly and surely to technological challenges which stretch the limits of the possible. Like burning gas without

Yes, you can.

douding the sky.

Air force to withdraw from Germany

By Bernard Gray, Defence Correspondent

The Royal Air Force is to leave Germany, ending a presence on the mainland of Europe which has lasted since the end of the second world war. The withdrawal marks a further decline in the level of foreign forces in Germany and another stage in the transformation of Nato from central European cold war warrior to mobile crisis reaction force.

Under the plan, announced in the annual UK defence white paper yesterday, the last British air base in Germany,

By Bernard Gray, Defence Correspondent

Mr Michael Portillo, the

defence secretary, urged the

US to open its markets to European defence equipment if Britain was to continue to

resist continental calls for US

equipment to be excluded from

Introducing the annual

defence white paper Mr Por-tillo emphasised the amount of

equipment Britain had bought

from the US in the past two

years. The UK has spent \$2.5bn (\$3.8bn) on 67 Apache tank-

busting helicopters, almost £1bn on 25 C-130J Hercules

transport aircraft, and has

bought 14 Chinook heavy-lift

transport helicopters, Toma-

hawk cruise missiles and Pave-

way III laser guided bombs, all

2002. Its four Tornado GR1 strike fighter squadrons will move to bases in Britain.

The last British presence in Germany will be provided by the army which has 24,000 troops in one armoured division and an artillery brigade. Mr Michael Portillo, the defence secretary, insisted that

the RAF's departure was not a lessening of Britain's commitment to Nato, and that the same aircraft would be available from Britain for Nato operations.

However, he said that Britain had to react to the

Minister urges US to

open defence markets

allow the US equal access to

defence equipment competi-

tions in future, the Pentagon

must "operate a two-way street", insisted Mr Portillo.

The UK is pressing the US to buy the BAe-Hughes Asraam

short range air-to-air missile, the GEC-Marconi Tiald air-

craft-mounted laser bomb

aimer, the Shorts StarStreak

high-velocity missile and field

guns from Royal Ordnance or VSEL.

tagon undersecretary for acqui-

sition, has commissioned

studies to determine which

European programmes the US might consider.

not, the UK procurement min-

ister, dismissed the idea that

such warnings meant that the

UK would automatically buy

European or British in its pro-curement competitions. "We be decided early next year.

However, Mr James Arbuth-

Mr Paul Kaminski, the Pen-

RAF Brüggen, will close in changed strategic circumstances, and that basing the aircraft in the UK would produce savings estimated at £25m (\$37.75m) a year.

Mr Portillo added that the RAF has had problems training in Germany since the fall of the Berlin Wall. In 1990 Germany curtailed low flying, which meant that the RAF Tornados stationed there had to cross the North Sea to Scotland to train.

At its peak in 1985 Britain had 12,000 RAF personnel in Germany on four bases with over 120 combat aircraft. Britain's total presence in

are interested in the best

equipment for our forces at the

will make our decisions on the

basis of all the factors, of

which industrial concerns is

seem to remain on course,

according to the white paper published yesterday and most

have strong US as well as

Mr Arbuthnot confirmed

that the MoD was likely to

for the Nimrod maritime patrol

aircraft by the summer. Two

programmes for £650m of air-

aunched cruise missiles and

£700m of air-launched anti-tank

missiles are also likely to be

decided before parliament rises

in July. A third programme for

£800m of long range missiles for the Eurofighter is likely to

decide on a £2.5bn replacemen

All of those competitions

one component," he said.

Ruronean contenders.

st value for money, and we

Germany will have fallen from a peak of 71,000 a decade ago to just more than 20,000 by the turn of the century. This mirrors the withdrawal of other Nato forces with the US cutting its troop numbers from 300,000 to under 100,000 over the same period.

Nato planners say that with Russia no longer a threat, Nato must adapt to respond to more varied crises such as the invasion of Kuwait and the war in Bosnia. It has established a Rapid Reaction Corps, run by the UK, which was, for example, given the job of running the ground forces in Bosnia.

Nato is also working on the idea of Combined Joint Task Forces, which would allow some Nato members to use alliance equipment without all of Nato's members becoming involved

The cold war organisation is evolving in other ways too. France is moving closer to rejoining the Nato military structures and many central and eastern European countries wish to join the alliance.

Any expansion of Nato is likely to change the nature of the alliance further and mean that it will have to be increasingly flexible if it is to survive.

Picture of stagnating industry grows

By Graham Bowley. onomics Staff

Britain's manufacturers yesterday reported the first fall in factory output for 3% years last month as companies suffered the biggest decline in new orders since September

The latest survey of industry by the Chartered Institute of Purchasing & Supply added to the gloom surrounding British manufacturing, prompting further speculation in the City of London that interest rates might fall again soon.

exchanges, the pound fell to a two-year low against the dol-lar, due mainly to anxiety ahead of today's local elections in which the government is \$1.497 against the dollar and at DM2.295 against the D-Mark.

opinion polls.

The institute's measure of price pressures fell to the lowest level since the survey began in 1991 as manufacturers cut prices for the sixth consec-

Mr Alex Garrard, UK economist at UBS, said: "The chancellor now has plenty of ammunition to push for a further rate cut, with widespread losses expected in the local elections fuelling backbench pressure on the chancellor to deliver." One glimmer of light was provided by demand for consumer goods, which remained buoyant - causing a

tration of the widening gulf between the consumer side of the economy, where activity appears to be strengthening. and industry, which seems to be stagnating.

This was the third month in

He said he was "encouraged" by the pick up in the consumer sector but that the government would now find it "very difficult to defend its upbeat growth forecasts for this year". The buoyancy of the conumer sector meant factories took on more staff for the first time in four months although companies making intermediate and investment goods con-

UK defence equipment programme 1996-97 Total: £9.052bn supportand spares \$2.59bp ---Land

Mr Portillo stressed that co-operation with other European countries was increasing. Difficulties between Britain and Germany over the share of work on the four-nation £35hn Eurofighter project have been resolved, and the MoD expects to place contracts for the Eurofighter production tooling shortly. The UK has also teamed with France and Italy to develop a new air-defence

frigate in a programme worth

shout £7hn. Agreement for the UK to work with France and Germany on a new "battlefield taxi" would lead to the UK joining the nascent Franco-German arms agency.

However, the white paper

said that the UK was working towards rejoining the programme for the Future Large Aircraft European transporter, but with continental commitment weakening, no date had

Share price expectation for Railtrack announced

By Charles Batchelor, Transport Correspondent

While Mr Robert Horton, the chairman of Railtrack, was in Boston yesterday drumming up interest among US institutions for the company's sale on May 20, the government announced that it expected the company to float on the stock market for between £1.75bn (\$2.64bn) and £1.95bn.

Shares in the company, which has taken over British Rail's track, stations and sigpriced at between 340p and 380p for UK investors, roughly in line with expectations. Large institutions and international investors will be required to pay an additional 10p per share. But the final the amount of investor interest, will not be decided until just before the listing of the company's shares on the London stock market.

The government opted for a cautious valuation of the company's shares to spite of a lastminute flood of registrations from private UK investors keen to qualify for the substantial discounts and bonuses which are on offer. A total of 1.9m small investors have registered with a "share shop". City of London analysts said

announced by Sir George Young, transport secretary, represented fair value for a privatisation which has aroused such criticism from the opposition political parties and the public at large. But price, which will depend on the pricing was described as "

a cynical misuse of national resources," by Ms Clare Short, the opposition Labour party's

Mr David Myrddin Evans, an analyst at Kleinwort Benson Securities, said: "The share has been heavily discounted because of political worries . . . the valuation is in line with the City's expectations although the yield is at the top end for the utilities sector." Setting the Railtrack price

range marks another step towards completing the con-troversial sell-off of British Rail, Railtrack will issue 500m shares although up to 65m will be held back to allow stock market fluctuations to be smoothed out in the first month of trading.

Investment in chemicals delayed

By Jenny Luesby In London

Increased economic uncertainty prompted chemical companies to delay up to a fifth of their investment in the UK last year, but most intend to catch up this year, triggering a 14 per cent increase in capital spending to £2.35bn (\$3,54hn)

Most of the increase will go into bulk chemical production in the north-east, where the Department of Trade and Industry is promoting Teesside icals zone, in competition with the current leader, Rotterdam. The Teesside initiative has prompted nearly £500m of investment announcements since its launch last year. Most of these will be expansions of

2200m investment by DuPont and £155m by Imperial Chemical Industries. For the chemical industry as a whole, UK investment rose by 2.8 per cent last year, to £1.99bn. This was the first rise since 1991. But companies surveyed by

the Chemicals Industries Association - responsible for more than half the investment expected to invest 20 per cent more in the UK than in 1994. but invested 2.5 per cent less. They blamed industry restructuring - which has seen change ownership - and increased economic uncertainty for this shortfall, which is far greater than normal. However, they expected

authorisations for future investment in the UK to jump Lex. Page 16 existing plants, including a by 17 per cent this year.

MPs are accused of 'childish xenophobia'

By John Kempiner

A concerted campaign to defend the prime minister's approach to Europe and his dership style intensified yesterday with an attack by Mr Malcolm Rifkind, foreign secretary, on the "childish xenophobia" of some in the governing Conservative party.

Mr Rifkind's intervention, which came a day after an endorsement of the European ideal by Mr Michael Heseltine, seen as an attempt to counter the calls for retribution against the European Union over the beef crisis.

The government's inability to secure a lifting of the ban on UK beef led to a renewed bout of anti-European fever in the House of Commons, as several Tory MPs continued to fuel speculation about Mr. John Major's hold on power. But both Mr Heseltine and

Mr John Redwood, the former Welsh secretary who contested the leadership last year, gave categorical statements that they were fully committed to degree of integration and fighting the general election under Mr Major. Mr Rifkind, who like Mr

Major has in recent months made limited gestures to Eurosceptics, called for an end to the European debate being "conducted at the extreme" Britain, he suggested, could be among a majority of member states not to join a single currency if it came into being in

"The concept of the EU as a tightly-knit group of countries lously to the government's all submitting to the same agreed policy on the single cur-

supra-national authority is sustainable for the fore able future," Mr Rifkind told the European Policy Forum. Meanwhile Mr Kenneth

Clarke, the chancellor, said yesterday in evidence to the Treasury select committee. that opponents of a single European currency had tried the build the idea up into a "giant political project" for their own purposes.

Mr Clarke atuck scrum-

rency saying it was too early to decide whether Britain should join and that he was content with the idea of a referendum. But the chancellor left no doubt that he was sympathetic to the idea of European monetary union. While conceding that opponents of a single currency were not isolationist in intent, he said they might be "isolationist in consequence". Whether the UK joined or not, Britain should aim to be in the 'premier league" of countries

that were eligible to do so, he

However, on the foreign

expected to suffer heavy losses. The pound closed in London at

Analysts believe the chancellor of the exchequer will now be under intense pressure to cut interest rates to engineer faster growth and restore the government's standing in the

utive month.

rise in output in the consumer

But this was more than off-set by declines in orders for investment and intermediate goods in both the home market and those outside the UK.

This was another stark illus-

Separate figures yesterday from the Bank of England pro-vided more evidence of rising consumer demand. Net consumer borrowing grew by a seasonally adjusted £700m \$1:01bn) in March - more than the City had expected and conconsumer demand.

The institute's overall index of manufacturing activity which collates data on stocks, employment, output, delivery times and orders from purchasing managers at 310 companies across the UK - was a season-ally adjusted 48.3 last month compared with 49.4 in March. A reading below 50 indicates a contraction in activity.

row activity has declined. Mr. Peter Thomson, the institute's director-general, said there had now been no growth in manufecturing for nine months.

Euro'96 ticket sales shortfall

Almost a quarter of the tickets for Euro 98, the European Championship football tournament have yet to be sold, just

over a month before the competition starts.

The championship, to be held in eight English cities in June, is the biggest sporting event in the UK since the 1966 World Cup in 1966. But interest is so low that tickets are still available for the quarter and semi final games at Wembley and for Italy's three group games. The executive said that between 1m and 1.1m tickets have been sold from a total of

The shortfall has occurred partly because English football fans are busy following the battle for the domestic league title Also, many of the 16 participating teams are bringing few fans and will attract few locals. None of the five eastern European sides - Croatia, Russia, Bulgaria, the Czech Republic and Romania - have taken up their quota of 7,000 tickets per match. "That was expected," the FA said. Croatia has taken just 2,000 tickets in total for its three group matches. Denmark, with 12,000 tickets per match, and Turkey, with 11,000, have exceeded their quotas, taking more than soccar giants Italy and Germany. The FA also let Switzerland exceed

Accounting proposals floated

The Accounting Standards Board yesterday issued discussion papers on two issues - earnings per share and segmental reporting - in an effort to strengthen its hand in forthcoming discussions at an international level. The board wants to gather UK views on the two issues which are the subject of draft proposals from the International Accounting Standards Committee and the US Financial Accounting Standards Board.

Sir David Tweedie, chairman of the board, said that "comments we receive should help us reflect UK views in interna tional discussions and ... determine whether the current UK requirements should be amended". The issues in the earnings per share paper are the calculation of diluted earnings per share and disclosure requirements. The paper on segmental reporting looks at the differences between the US and IASC By Jim Kelly, Accountancy Correspondent

Auditors offer liability deal

Auditors yesterday offered to give a wider range of assurances about companies - including whether material fraud might be present - if the government would agree to limit auditors' legal liability. The Institute of Chartered Accountants in England and Wales said yesterday the idea was "an offer on the table" for the Department of Trade and Industry.

In return for the assurances to shareholders, auditors want the DTI to reform the law of joint and several liability, for a wide range of professions, and replace it with a form of proportional liability. Accountants, and many other professionals, complain that under the existing law they can end up paying all the damages in a case when others, often uninsured, are more to blame.

Higher profits forecast

Chatset, the independent Lloyd's analyst, yes-LIOYD'S terrlay said it expected the insurance market to report a profit of about £1.05bn when results for 1993 are unveiled later this year under Lloyd's three-year accounting system. The figure was higher than earlier Chatset forecasts and highlighted the turnaround in Lloyd's profitability after losses of more than £8bn reported in recent

Separately, insurance analysis at Hoare Govett said the recent erosion of underwriting margins had been less than feared and they were expecting global pre-tax profits of £747m for 1995 and £471m in 1996. But Christie Brockbank Shipton (CBS), a Lloyd's agency, warned marine insurers had made large cuts in premium rates and could see losses this year. Meanwhile, CBS is close to buying Chaiset in a deal which values Chatset at about £100,000.

By Ralph Atkins, Insurance Corresponden

Internet take-up rate steadies

The number of Internet users in the UK will rise from 1.3m at the end of 1995 to 7.7m by the end of the decade in spite of slowing subscriber growth rates, according to International Data Corporation, the high technology consultancy. The IDC report says subscriber growth will continue to be driven by the attractions of electronic mail, enhanced content on the World Wide Web and connecting internal corporate networks - intranets. Web usage is expected to 1985 96 67 98 98 2000 be limited for some time, mainly because of capacity constraints, and IDC suggests

that, "the wide area network bottleneck/capacity concern in the UK is the largest inhibitor to rapid uptake of the Internet

In spite of this IDC expects the markets for Internet and intranet-related software and services to grow rapidly, at 36 per cent and 70 per cent compound annual growth rates respectively during the next five years, albeit from a small

Meanwhile Unipalm Pipex, one of the leading UK-based Internet access providers, is launching an upgraded service today which will provide its personal subscribers with what it claims is the world's fastest dial-up access to the internet using a standard telephone line. Paul Talyor, London

Tourist numbers soar

The UK expects to welcome a record 25m visitors to its shores in 1996 after seeing a 6 per cent jump in numbers in January and February. The UK's popularity has been enhanced by sterling weakness, the opening of the Channel Tunnel and effective marketing.

There were 24.0m visitors to the UK in the twelve months to the end of February, up 12 per cent rise on the previous 12 months, according to National Statistics. The figure was swelled by a 9 per cent rise in American visitors, a 12 per cent increase in West European visitors, and a 12 per cent jump in visitors from the rest of the world. UK visits overseas rose 4 per cent to 42.0m in the twelve months to the end of February. By Christopher Brown-Humes

HK minorities

By John Ridding in Hong Kong

A Labour government would give Hong Kong's ethnic ninorities full right of abode in Britain if they were stateless after the territory returned to China next year, Mr Robin Cook, the shadow foreign secretary said yesterday. Mr Cook said the Conserva-

tive government's stance that

members of minority groups would be given right of abode

if they came under pressure to

leave Hong Kong was inade-quate. He estimated the numhers concerned at between 3,000 and 5,000. On most issues relating to Hong Kong, however, Mr Cook struck a similar stand to the government. "We want to avoid making Hong Kong a partisan matter within British politics," he said, adding that

Relations between Britain and China have come under serious strain in recent weeks because of Beijing's plan to replace the territory's elected war widows in the territory.

this would damage Britain's

interests in dealing with

legislature. Mr Cook pledged that a Labour government would resist such a move. Asked whether it would take the matter to the United Nations and the International Court of Justice, the shadow foreign secretary said that all options would be available Mr Cook said there was little

prospect that a Labour govern-ment would seek to replace Mr Chris Patten, the governor of Hong Kong, who has been strongly criticised by Beijing for implementing democratic reforms. Mr Cook said he would take "an awful lot of persuading" of the need to replace the governor.

In addition to the right of abode for ethnic minorities, Mr Cook said that he would write to Mr John Major, the British prime minister, urging him to bring forward legislation granting citizenship to war widows in Hong Kong. During a visit to Hong Kong in March, Mr Major said that this would be the subject of a private members bill. The Hong Kong government estimates there are 54

Labour pledge to Machine tools factory considered

By Peter Marsh in London

Amada, the Japanese company that is the world's biggest machine tool builder, is considering setting up a UK manufacturing operation. Mr Nobuyuki Ueda, Amada's president, said the company was "studying the possibili-ties" of a UK plant to add to its

business's annual exhibition, would give no further details. Assuming Amada gave the ahead to a plant, it would be a further fillip for the UK machine industry, which is in buoyant mood after a bleak period in the early 1990s recession when order books and out-

ing operation in France. put fell steeply.

Mr Ueda, interviewed in Rirmingham at the machine tool

would fit in with trends in the industry of setting up factories close to main customers.

There are strong incentives for Japanese machine tool companies to set up European production operations: the strong yen, which makes exporting from Japan to Europe unatadapting Japanese-made machinery to meet EU safety regulations.

Industry sources said that if Amada decided on a plant, which would add to its existing sales operation in Kidderminster, western England, it would probably involve spending of at least £10m and might create tractive, and the high costs of ing jobs.

Political tensions heightened by beef negotiations

By George Parker at Westminster

Mr Douglas Hogg, agriculture minister, was subjected to scarcely concealed contempt from many MPs in the governing Conservative party yesterday, when he reported to the House of Commons his latest attempts to persuade the European Union to lift the ban on British beef

exports. Euro-sceptic Tory MPs laughed mockingly when Mr Hogg insisted that his fellow EU agriculture ministers "explicitly recognise that the ban is temporary". Mr Hogg's allies insist that he did

make solid progress at the EU agricul-

ture council in Luxembourg, but his

inability to secure an early lifting of

Consumer organisations were feed samples taken at mills in Februshocked yesterday by the government's discovery that cattle feed continues to be contaminated with sheep remains eight years after it was banned in an effort to eliminate BSE, write Deborah Hargreaves and Caro-

the ban has fuelled the war raging

in the Conservative party over Ешгоре. Mr Hogg, who is anxious to take the political heat out of the beef crisis, insisted his policy of "persuasion and negotiation" was the best way to

achieve a lifting of the ban.

ary and March, three were contaminated with sheep remains and five with pig material.

The use of sheep remains in feed for cattle was banned in 1988 because it was believed that scrapie - a dis-ease in sheep similar to BSE - could The Ministry of Agriculture be transmitted to cattle. Pig carcases revealed this week that of 834 cattle were banned from cattle feed in 1994.

> ple to a step-by-step lifting of the ban, possibly starting with an easing of restrictions on tallow, gelatine and gemen exports.

He said he would consider carefully EU suggestions of a selective slaughter policy that went wider than the

findings, but those mills where it was found will now be monitored on a weekly basis," he said. He said the EU had agreed in princi-42,000 cattle he has proposed, but not

year and that feed at farms and

feed mills was being regularly

"We were disappointed with these

sure finally put in place will be very much on the lines I have already indicated to the House," he said. Tory right-wingers packed the

chamber to air their anger at the con-

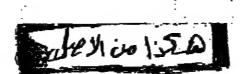
tinuing beef ban, and their

much wider. "The scale of any mea-

derisive laughter during Mr Hogg's A ministry official said that a test statement reflected their growing confor detecting animal protein in feed fidence had only been developed in the past Mr Nicholas Budgen, Tory MP for

Wolverhampton South West, warned Mr Hogg that the Commons would not approve any EU demands for a wider cull of apparently healthy cat-tle, while Mr Nicholas Winterton, MP for Macclesfield, claimed the European Union was "out to destroy" the British cattle processing and distribution industry.
Mr Bill Cash, MP for Stafford, called

for the suspension of Britain's payments to Brussels while the senior right-winger. Sir Ivan Lawrence, said the government should ban imports of French and German beef to compen-



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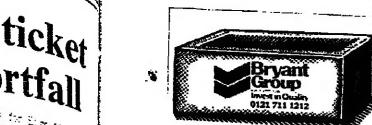
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FINANCIAL TIMES

COMPANIES & MARKETS

THE FINANCIAL TIMES LIMITED 1996

Thursday May 2 1996

Fletcher King CHARTERED SURVEYORS COMMERCIAL PROPERTY CONSULTANTS London 0171-493 8400 BM::NGHAM MANCHESTER NORWICH NORTHAMPTON

matches

Coca-Cola

stock split

PepsiCo, the US snack and soft

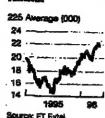
drinks group, yesterday mirrored its US rival Coca-Cola by

IN BRIEF

Motorola team calls for EC Irish probe

Persona, a consortium involving Motorola of the US, is to complain to the European Commission over the Irish government's handling of the competition for Ireland's second GSM mobile phone licence. Page 19

Nikkei retreats below 22,000 level Mikket



Tokyo's Nikkei 225 index declined I per cent, falling below the 22,000 level for the first time in seven trading days. The Nikkei slipped 226.29 to 21,815.01 as uncertainty over the course of the yen weighed on investor sentiment. Bargain hunting by domestic institutions provided some support for the index, but their purchases remained limited ahead of

the five-day weekend starting on Friday. Page 36 The rise and fall of the AIOC empire

The Russian metals business in the early 1990s offered a modern equivalent of America's wild west, and some of the most successful cowboys worked for AIOC, a New York-based commodities group. But more than any other company, the rise and fall of AIOC demonstrated the opportunities and lethal pitfalls of the Russian metals trading market.

Pacific BBA blds A\$275m for Azon Pacific BBA, the Australian manufacturing group, launched a hostile A\$275m (US\$217m) bid for Azon, the former manufacturing division of the Boral building materials group, which was floated off on the stock market three years ago. Page 21

Banco Santander to buy out partner in CCH Banco Santander, the Spanish banking group, is to pay DM300m (\$195.6m) to buy out the 50 per cent stake held by its partner, Royal Bank of Scotland. in CC-Holding, parent company of Germany's CC-Bank consumer finance group. Page 22

BAT rises to £600m in first quarter BAT Industries of the UK reported underlying firstquarter profit growth of 10 per cent with its tobacco businesses performing slightly worse than forecast and its financial services marginally better. Pre-tax profits including an exceptional gain were up 16 per cent to £600m (\$900m). Page 23

Mergers lift Sons of Gwalla Into gold Index Only 14 months ago Sons of Gwalia was - in production terms at least - one of the also-rans among Australian gold miners. But three quick deals since then have propelled it into fifth place among Australian gold producers and earned it a place in the Financial Times Gold Mines Index from tomorrow.

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	47.5	4	5.9	Manhattan	4.25	-	0.35

Chief price changes vesterday

BA scraps plan for 60 regional jets PepsiCo

By Michael Skapinker, Aerospace Correspondent

British Airways has shelved plans to spend more than \$1bn on 60 regional jets. The purchase would have been the airline's big-

gest order for five years. BA said yesterday that it had told leading aircraft manufacturers to stop work on their bids for the order. The airline said: "We've decided to put the tender process on hold to give us time to evaluate our regional oper-

BA asked five manufacturers

By Hugh Carnegy in Stockholm

Mr Bo Lerenius, chief executive

of Stena Line, said yesterday the Swedish ferry operator was com-mitted to remaining an indepen-

dent carrier on the English

Channel and was not interested

in a merger with the UK's P&O

to meet tough competition from Eurotunnel. "We have no inten-

tion of doing anything else but going on our own," he said.

Mr Lerenius was responding to news that P&O, the biggest ferry operator on the Channel, was set

to seek permission from the

Office of Fair Trading to be

allowed to hold merger discus-

sions with Stens. Ferry operators have been in a price-cutting bat-

taken a share of more than 40

per cent of Channel traffic since

Mr Levenius, speaking at Sten-a's base in Gothenburg, said his company would "of course" be willing to discuss changes in

rules limiting co-operation by ferry companies on the Channel

the light of Eurotunnel's impact.

be right" to discuss the issue

P&O on the issue. Both ferry

companies unsuccessfully sought a relaxation of channel competi-

tion rules three years ago in anticipation of Eurotunnel's

opening. Stena last month blamed com-

petition from Euroiumnel for a 23 per cent increase in its losses

in the first three months to

SKr504m (£49m), Mr Lerenius said Stena had

recently increased its capacity

on channel routes from three

ships to five after scrapping a previous pooling arrangement it

had with the French operator

SNAT. "Our strategy is to go on by ourselves and strengthen

capacity. We are taking market share," he said. He said if Eurotunnel took 50

per cent of Channel traffic - and

Channel traffic continued to

grow - there would be 18m to

15m passengers a year available

to ferry operators.
"That would still be the biggest ferry route in the world. We

believe there will be room for

two operators apart from the tunnel and we intend to be one of them," Mr Lerenius said.

There are five surface opera-

ates four routes, but has 12 other

ferry routes in northern Europe, making it less dependent on the

opened last year.

to submit bids in January. It said it was interested in making 30 firm orders for regional jets and taking an additional 30 options. The five manufacturers asked to submit bids were Boeing and McDonnell Douglas of the US, British Aerospace, Fokker of the Netherlands, which has since collapsed, and Airbus Industrie, the European consortium.

The regional jet purchase would have been the largest made by BA since August 1991, when it ordered 15 Boeing 777s. with options on a further 15, and 24 Boeing 747-400s.

BA said yesterday it had decided that the planned regional jet purchase did not make eco-nomic sense. "We made it clear that to fund such a large purchase, changes would be required in our regional cost base. That's

Aerospace industry executives believe BA's change of mind is a result of a re-evaluation of the airline's priorities by Mr Robert Ayling, who took over as chief executive at the start of the year. BA has continued to express an interest, however, in buying a new large aircraft, capable of car-

Boeing hopes to begin work on a 500-seat aircraft by the end of the year. Airbus says it hopes to announce firm plans for a 550-seater by the end of 1997.

When BA invited the five manufacturers to bid for the regional jet order, it said it wanted aircraft in the 80, 100 and 120-seat category to replace Boeing 737-200s on UK domestic routes and on services to continental Europe from Birmingham, Edinburgh, Glasgow and Manchester.

BA also said some of the aircraft would be used by Deutsche

it has a 49 per cent stake. Although Deutsche BA has won passengers away from Lufthansa. Germany's main carrier, it runs at a loss.

The regional aircraft order had been seen by several manufacturers as an opportunity to break Boeing's dominance as a supplier to BA. The carrier has never bought an Airbus aircraft, although its fleet contains 10 Air-British Caledonian before BA acquired the airline in 1987.

announcing a two-for-one stock split, doubling the number of authorised shares to 3.6bn. Emphasising the rivalry between the two, PepsiCo said trading in the split stock would begin on May 13 - the same date

fixed by Coca-Cola for the start of trading in its split stock. The move, announced at PepsiCo's annual meeting, follows Tuesday's publication of its first-quarter results, showing net income 23 per cent higher at \$394m. Those figures lifted PepsiCo's shares \$2% to \$63%. and yesterday they were up another 8% at \$63% in early

trading. In the US, stock splits are taken as a sign that companies are confident about their growth prospects, because they suggest that continuing increases in their share prices will put the cost of even a single share out of the reach of small investors.

Yesterday Mr Wayne Calloway, chairman, said: "PepsiCo's sbareholders are clearly benefiting from the strength of all three of our businesses, and I'm confi-dent our best years are still to come. The stock split will make it easier for individual investors to purchase shares."

PepsiCo also announced a 15 per cent rise in its quarterly divi-dend from 10 cents to 11.5 cents after the split.

At the end of last year Coca-Cols announced plans for a two-for-one stock split, increasing the number of authorised shares from 2.8bn to 5.6bn. It said the split was in keeping with its tra-dition of keeping its share price at a level convenient for large and small investors. Two months later it announced a 14 per cent rise in its quarterly dividend to 25 cents a share, pre-split.

Coca-Cola appears to have more of a reason to split its stock than PepsiCo because its price is higher. Both companies have seen big increases in their trading yesterday, Coca-Cola's price was up from \$51% at the beginning of last year to \$81%, while PepsiCo's price had risen from \$36% to \$68% over the same period.

Coca-Cola's last three stock splits were a two-for-one splits in 1992 and 1990 and a three-for one split in 1986. PepsiCo had three-for-one splits in 1990, 1986 and 1977.

Stena chief Ralph Atkins reports on plans to repeat a successful UK formula Aiming for a dismisses direct hit on US idea of merging insurance market with P&O

ike a Hollywood star scared of being typecast, Mr Peter Wood (right) the nearest the UK insurance industry gets to a celebrity - just wants to be free.

Direct Line, the telephonebased insurer he founded 11 years ago, has transformed the private motor and bousehold sectors - in the UK and increasingly overseas where others are mimicking his methods of selling direct to customers. Mr Wood has become a multi-millionaire. But Mr Wood has become rest-

less. Under his recently renegotiated contract, he can spend half his time on non-Direct Line business. Last week, he unveiled details of a separate US venture, tle with Eurotunnel, which has Direct Response, in conjunction with business partner Mr Jim Stone, chairman of Plymouth Rock, a Boston-based insurer. They have raised \$215m to launch the auto insurer which, like Direct Line, will cut out intermediaries and their commissions. The plan is to cover most states within five years.

if the OFT reopened the issue in There is an obvious motive to explore the \$100bn US auto mar-The company has acknowledged the likelihood of rationalket. After explosive profits growth by Direct Line, now the isation and said "the time might UK's largest private motor with the authorities. "If that six months to March are expected came up we would talk to them," Mr Lerenius said. "But we are to show a turnround. Fierce price competition among UK insurers has eroded margins while excepnot interested in taking the initionally severe weather has He said Stena, the world's bigpushed up claims, perhaps cutgest ferry operator, had had no recent contact with the OFT or ting first-half profits to virtually nothing.

Mr Wood denies losing affec-

tion, however. "I could never get fed up with Direct Line," he says. "It's my baby." Growth in motor and household has slowed and, although Direct Line will not cede market share, "this is not the best time to put the foot on the accelerator because people are writing business at stupid rates." But, Mr Wood says, if Direct Line is finding it hard, "there are lots of competitors and a lot of them are losing huge amounts of money". Moreover, Direct Line has expansion plans. The market for travel insurance is being tested and pet policies are being considered.

US private auto insurers

Top 10	Merket
Groups	share (%)
State Ferm	22.2
Alistate	. 12.1
Fermore	6.2
Nationwide	3.7
USAA	3.5
Geico	2.0
Liberty, Mutual	2.0
Prudential of America	1.8
Progressive	1.6
American Family	1.6
Total of Top 10	58.5
Total of Industry	100
Source: AM Bust	

Talks are in process on a possi ble German venture following the launch last year of Linea Directa Aseguradora. Direct Line is also looking to build telephone sales of other financial services products, such as mortgage and life assurance, to create what Mr Wood describes as "the building

society of the future". Mr Wood's restlessness stems not so much from the challenges Direct Line faces - more his determination to have control of his life. His is a director of Royal Bank of Scotland, Direct Line's parent, and a substantial share-

Mr Wood says, "I own a third of 1 per cent of Royal Bank, a 'rounding error'. I don't absolutely control my own destiny... I don't want to find that somebody has turned up at St Andrew Square [Royal Bank's Edinburgh head office] and bought Royal Bank and is telling me what to

So Mr Wood has prepared his defences against the often rumoured possibility of Royal Bank being taken over. He has rights to buy out Privilege, a sister company to Direct Line which specialises in non-standard motorists. This, he says, could be built up to rival Direct Line Or, Mr Wood proposes: "If any-

one came to buy Royal Bank, if there was any way they would sell me Direct Line at a reasonable cost, I would certainly consider raising the money." The US venture would be

another fall-back. Mr Wood plans to spend one week in four living in Boston (which, if he only spends half his time at Direct Line, still leaves opportunities for other projects). He owns about 10 per cent of Direct Response; business partner Mr Jim Stone about 18 per cent. But the two will have control over most decisions and, if the company performs well, Mr Wood's stake would increase substantially. Softly-spoken and coy about his personal finances, there is a entrepreneurial twinkle in his eyes: "I can make between zero and a substantial amount of

money."
It may not be easy. The US auto market is dominated by Allstate and State Farm, by no means laggards among insurers. Agents and other intermediaries already make use of telephone sales so the extra convenience Direct Response offers consumers might be limited.

Moreover, Mr Warren Buffett's Berkshire Hathaway investment group last year increased its investment in Geico, an insurer which already sells direct to cus-tomers - perhaps creating a formidable opponent for Mr Wood. At the same time, the US market is highly regulated. It will be ability to change premium rates

Elektrowatt to place UK stake

By Christopher Price in London

Elektrowatt, the Swiss engineering and power group, is to place its 40 per cent holding in Eurodis Electron, the UK elec-tronics components distributor, after failing to find a buyer for

It had hoped to sell the holding to a third party. A 17 per cent fall in Eurodis Electron's shares yesterday - down 49p at 233p -partly reflected the removal of the bid potential. A buyer would have had to mount an offer for the entire group. There was also a pessimistic trading statement from Eurodis, and at yesterday's share price the company was valued at £134m (\$302m).

The failure to clinch a trade sale will come as a severe disap-pointment to Elektrowatt, which

will have hoped to make up to £90m from the deal. The sale is part of a larger disposal programme put in place six months ago in order to help fund the SFr1.8bn (\$1.5bn) takeover of Landis & Gyr, the Swiss electronics group.

However, analysts said the Swiss group would be lucky to realise £55m from the sale, which would have to be struck at a discount to the prevailing share The third-quarter trading state-

ment from Eurodis Electron yesterday said sales growth had slowed and would probably be 10 per cent, rather than the 15 per cent previously forecast for 1996. The company blamed competitive market conditions in Europe. News of Elektrowatt's decision

delighted Mr Robert Leigh, chair-

man of Eurodis Electron, who had been furious over the group to sell its stake. The decision was taken in December, just five months after Elektrowatt had merged its electronics distribution business, Eurodis, with Electron House of the UK. Mr Leigh assumed the Swiss group was a long-term shareholder.

An unamed German group held three-way discussions with Elektrowatt and Eurodis Electron. but a price could not be agreed. The Swiss headquarters of

Eurodis are to be closed and Mr Rolf Thurnherr, the joint chief executive, is to leave the company. Mr Barry Charles will become the sole chief executive. Estimated cost savings from the rationalisation moves would eventually amount to £1.5m.



Above all, Mr Wood is convinced successful insurance com-

panies will be those closest to the

customer. Insurers which try to

appeal to brokers and agents,

while also setting up direct operations "are caught between

the devil and the deep blue sea...



the giants of UK insurance." The

US market, he points out, is huge

and "direct" writers, including

Geico, have only small market

shares. "It is not as if I'm taking

on Coca-Cola." Direct Response will use Mr

Wood's expertise in setting up

AIOC's dominance of the region's metals markets ended last month in bankruptcy proceedings. FT writers explain the causes of its collapse

The rise and fall of an empire built in Russia

magine the brash, aries lavish inducements. self-styled "masters of the In 1994, one western n universe" who dominated Wall Street in the 1980s doing deals in an economy as freewheeling as the wild west. Then you will have a fair impression of the Russian metals business in the early 1990s. The Russian metals sector became a modern-day Klondike for Soviet-era factory managers and their western trading part-

More than any other company, the rise and fall of AIOC, a New York-based commodities trading group, demonstrated the opportunities and lethal pitfalls of the Russian metals trading market.

Some of the most successful "cowboys" worked for AIOC, owned and run by Mr Alan Clingman, a 36-year-old entrepreneur who says he made his first fortune broking oil in his native South Africa.

At the height of its succes AIOC became a dominant force in the former Soviet Union's metals sector. In May 1993, AIOC took over Swedish conglomerate Axel Johnson's raw materials trading subsidiary, creating a company which Mr Clingman claimed was the biggest independent US-based physical metals trading group with an annual turnover of

But after riding the highs of the Russian metals market for half a decade, AIOC suffered a series of setbacks last year. including the murder last September of one of its leading figures. This month it was forced into bankruptcy pro-ceedings by disgruntled western creditors. The company also owes Russian banks a

AIOC's rise began as the Soviet regime collapsed and its successor states began the long journey to a market economy. Trade in many commodities slipped out of the centralised control of bureaucrats in Moscow. But at the same time. a considerable gap remained between domestic and world prices. That difference made the metals trade a lucrative

Obtaining metal on the most favourable terms meant offering Soviet-era factory managers and government function-

In 1994, one western metals trader bitterly complained that a rival company had provided each member of an official delegation visiting London from Kazakhstan with three female companions; he had only supplied one escort per Kazakh when he had entertained the group the night before. He feared he might lose the deal.

But there was also a darker side to the fight for a profitable share of the Russian metals trade. The metals business was seen as one of the most savage sectors in an already tough economy. Last year at least

One western metals trader complained that a rival company had provided each member of an official Kazakh delegation visiting London with three female companions; he had only supplied one escort when he had entertained the group the night before. He feared be might lose the deal

half a dozen businessmen involved in the Russian metals industry were assassinated. One of the victims was Mr Felix Lvov, the guiding spirit behind AIOC's Russian operation. Many observers say his murder last September acted as a catalyst for the company's

A native of Dnepropetrovsk, in Ukraine's industrial heartland, Mr Lvov began to do business deals in the 1980s, when most private enterprise was a crime in the eyes of the Soviet state.

Mr Lvov was a ubiquitous presence in AIOC's Moscow office and, according to several former employees, he was the linchpin of the company's Rus-sian operations. Mr Lvov was particularly crucial to AIOC's ties with the Krasnoyarsk aluminium smelter, the second largest smelter in the world.

But when Mr Lvov was kidnapped, then shot and killed last September, AIOC immediately distanced itself from him.

Former employees and other industry sources say that shortly after Mr Lvov's murder, Mr Clingman circulated a memo which asserted that Mr Lyov had never been an AIOC employee, but had been only loosely affiliated with the company as an occasional outside consultant. In a recent interview, Mr Clingman described Mr Lvov as a mere "local part-

According to former AIOC traders, Mr Clingman justified his actions as "a step that was necessary to save the lives of other people in the company". But both within and outside the company, Mr Clingman's reaction to the murder had painful consequences. On top of losing the profitable Krasnoyarsk business and Mr Lvov's priceless network of contacts throughout the former Soviet Union, his murder soured Mr Clingman's relationship with many other senior AIOC fig-ures and tarnished the company's reputation in the industry.

"Clingman took a very ugly position - immediately after the death of Felix, he disowned him," says the head of a Russlan metals trading firm based in Moscow. "The people of AIOC also felt wounded. It emed like a betrayal."

People in the company also say that Mr Clingman's reaction to the murder embittered Mr Alexander Krasner, a Soviet emigre who was a partowner of the company and had been Mr Clingman's partner from the outset. Mr Krasner, who helped AIOC penetrate the byzantine Russian market and was distantly related to Mr Lvov, left the company at the beginning of this year.

The loss of Mr Lvov and his web of contacts was compounded by the second big reason for AIOC's collapse: sub-stantial trading losses. Some former AIOC employees allege that the company suffered losses of at least \$13m trading metals on the London Metal Exchange in late 1995 and at the beginning of this year.

But other former employees and current AIOC officials say the company's biggest setback was a large trading loss in ferro-chrome, a raw material used in stainless steel production. According to an official



AIOC press release, the company's loss on ferro-chrome, which is thought to be at least \$22m, was triggered when Turkish chrome miners went on strike last summer and blocked deliveries of AIOC chrome ore cargoes for which the company said it had

already paid.
"The delay in receipt of this ore forced AIOC to buy in ferro-chrome supplies at the height of the market to meet its contractual commitments to customers in the third quarter." the company said.

The difficulties were compounded in the fourth quarter of last year when AIOC received double quantities of ferro-chrome just as the market crashed.

AIOC's ferro-chrome business had already been damaged last May, when the Kazakh government transferred the management of the country's entire ferro-chrome indus-try to Japan Chrome, a member of the Transworld group and AIOC's fiercest rival in the metals trade in the former Soviet Union. The agreement allowed Japan Chrome to sever most pre-existing contracts unilaterally.

The steel industry also fell under the privatisation scheme, leading to the transfer last November of Karmet, a large Kazakh steel mill, to foreign managers. As in the ferrochrome industry, the new administration was freed from the company's old debts and contractual obligations. Sources at the mill and within AIOC say the transfer brought a loss of between \$6m and \$7m for AIOC.

AIOC's weakening positions in Russia and Kazakhstan and its trading losses were the biggest direct causes of its poor performance last year, but industry observers and former employees say the company also suffered because of a stra-

tion of its management.
"It is definitely a case of tegic mistake.
"At the end of 1994 and the hubris in the top manage-

This approach led to high overheads - estimated by some former employees at \$85m-\$45m annually - which made it difficult for the company to survive a lean year. At the end of 1995 and the

beginning of this year, all of these factors came together. AIOC began to collapse. The company experienced severe liquidity problems. It came under intense pressure from its backers in Russia and the west. Russian traders said the company began to sell off stocks "very quickly, with lit-tle concern for the best price".

As AIOC's financial woes mounted, Mr Clingman says he sought salvation from Mr Marc Rich, but after talks with the legendary commodities trader fell through, the pressure on AIOC from its creditors became even more intense.

Once it became known that our discussions with Marc Rich would not amount to a transaction, there were a lot of rumours in the market," said Mr Clingman. "A lot of our creditors became more aggressive in dealing with us. Without continuing financing, the company goes into a meltdown situation. It became a self-fulfilling situation."

In early March, several brokers issued margin calls to AIOC. When the company failed to meet them, the brokers liquidated AIOC's open positions, cancelled the firm's lines of credit and asked for immediate payment. Last month, fearing that AIOC would ditch its foreign assets in a fire-sale, a group of bro-kers, including Lehman Brothers, Crédit Lyonnais Rouse, Merrill Lynch and Mitsui Bussan, filed involuntary Chapter 11 proceedings against

the company.
In a letter to AIOC filed to the court, Mr William Olshan, a Lehman Brothers vice-president, alleged the company may have obtained credit "in bad faith".

Former AIOC employees But some former and current believe the company's trading AIOC employees are more worried about the local reaction. were compounded by the ambi-Some ex-employees said they had received serious warnings, and well-informed Russian businessmen believe AIOC's in Kiev

ment," said one senior trader senior management could be in who has now left the company. a dangerous position. "The past three months have been totally depressing," said one former employee. "It was a time of death threats. It's not that they say 'we will kill you'. more like 'we suggest for your

safety that you pay us'."

Tokobank, Menatep and Vneshtorghank, AIOC's biggest Russian creditors, reacted publicly to the company's collapse in a mild way, insisting that it would not significantly affect their balance sheets.

But a source at one of the banks said AIOC's default

Well-informed Russian businessmen believe that AIOC's senior management could be in a dangerous position. Some ex-employees said they had received warnings. The past three months have been depressing,' one said.
'It's not 'we will kill you', more like 'we suggest for your safety that you pay us'

marked a turning point in the assumptions Russia's fledgling capitalists make shout than western counterparts.

"It is a paradoxical situation for us, because we are accustomed to Russian clients not returning credits, but we don't expect it of westerners," he

Some observers see the crash of the high-flying AIOC traders as a Russian Bonfire of the Vanities, and warn that other foreign companies may collapse as the easy money of the early 1990s gives way to a more settled, long-term business environment. But others say the US company's failure could also, inadvertently, contribute to the coming of age of the Russian market, as Moscow financiers learn that even western capitalists can go broke.

Reports by Chrystia Freeland in Moscow, Kenneth Gooding in London, Sander Thoenes in Almaty and Matthew Kaminski

NEW ISSUE

This announcement appears as a matter of record only.

May, 1996



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\$8,000,000 Class B For the interest period 30 April 1996 to 31 July 1996 the notes will bear interest as follows: Interest payable 31 July 1996 will be as follows: A2 \$1,538.36 per \$92,552 note A3.51,687.30 per \$100,000 note B. \$1,775.27 per \$100,000 note Agent Morgan Guaranty Trust Company **JPMorgan**

beginning of 1995 the privatisa-

tion process in Russia really

took off and the trading compa-

nies were divided into insiders,

who bought shares, and outsiders who just traded," explained

the head of a Russian metals

trading company which has

acquired a majority holding in

one of the country's alumin-ium smelters. "AIOC made the

wrong strategic decision - they didn't spend money to buy

In an interview earlier this

month, Mr Clingman said that

one lesson to be drawn from AIOC's experience was that

"probably" the only way to

survive in Russia today is to

buy local companies. But Mr

Clingman said that "it was

never our ambition to become

losses and strategic mistakes

an investor in Russia."

stakes in Russian companies.

DEEPENING AND WIDENING OF THE ENTRANCE TO THE VENTSPILS LIQUID CARGO AREA.

1. The Verifipilic Port Authority is a port authority established in 1994 under the Port Law of the Government of Latvie.

The Ventspils Port Authority has initiated a ten year development plan for the port (1994 - 2004). One of the elements of the development plan is to allow larger vessels to the port by widering and deepening of the nevigational channel. of the development plan is to allow larger vess and the turning basin.

The dredging work required

· marken sill riose: moraine sedimenta (till), mainty consisting of still gravety sendy clavey slit

The material to be dredged is invested with boulders and cobbles and large morains stones.

The total quantity of material to be diseiged amounts to approx. 4.5 million m² of which approximately 3 million m² send, 0.7m² day and 0.8 million m² moreine sediments (till). The Ventspils Port Authority intends to invite tenders from pre Tebodin and Witteveen + Bos, both from the Netherlands, has been appointed to arrange the

It is expected that the contract for the execution of the dradging work will be signed if Authority and the successful bidder early August 1998. The currency of the contract will be USD. It is expected that the works will be completed within a period of 7 months.

Dredging contractors that have relevant experience and feet capable of carrying out the above reterred dredging works are invited to submit their qualifications in triplicate to the Ventspils Port Authority for the attention of Mr I. Sarmulla, Chief Executive, 8 Uzhaves str., 2601 VENTSPILS, LATVIA, not later than 14 May 1996; 12.00 hrs (tax qualification are not accepted).

. The qualification documents of the dredging contractors should follow the standard pre-qualification form as have ben issued by the FIDIC. The documents should contain at least the following information:

name, address, structure and organization of the company financial statement

joint venture arrangements (If any)

personnel resources

other resourcies

experience, geographical experience, relevant project completed

The Ventspile Port Authority reserves the right to quality or disquality any or all of the interested contractors.

CREDIT RATINGS

A unique quarterly source of reference from FT Financial Publishing, essential to all players in the international credit markets - borrowers, investors and intermediaries alike.

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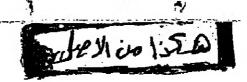
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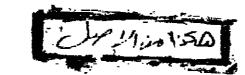
all types of investing institutions; also lending at commercial banks, heads of corporate and

senior personnel at issuing corporations, inst



Financial Publishing





s of its collapse

IRSDAY MAY 2 1996

senior management could be in emor management touch be in a dangerous position. The past three months have been sotally depressing a said one former employee. It was a death threats by former employed. If Was a time of death threats, it's no that they say, we will kill you more like We suggest for job more like We suggest for job

Tokobank. Menatep and Tokobane. Menatep and Vneshtorgbank. Alogs biggs Russian creditors, reacted but lichy to the company's college in a mild way, mesting that it would not significantly affect that have there. their balance theer. But a source at one of the banks said Alons default

Well-informed Russian businessmen believe that AIOC's senior management could be a dangerous position Some ex-employees and they had received Tre that the will kill you. more like we suggest for your

warnings. The past three months have been depressing, one said. salety that you pay to point is in

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Motorola team seeks EU probe over Irish licence

By John McManus in Dublin

A consortium involving Motorola, of the US, is to complain to the European Commission over the Irish government's handling of the competition for Ireland's second GSM mobile phone licence.

Persona, the consortium involving Motorola and ESB. the Irish state electricity company, was one of five unsuc-cessful bidders for the licence, which was awarded last November, However, Esat Digifone, the successful Irish-Norwegian consortium, has yet to sign the licence, which is still be drafted by the Irish attorney general's office.

Motorola is claiming the

competition process lacked transparency and openness, and therefore infringed European law. They also claim it was skewed to produce less competition for Eircell, the state-owned mobile phone

This included capping the licence fee at 1£15m (\$23.3m) and giving a relatively low weighting to tariffs in the selection criteria. Such action could constitute state aid to Eircell, maintains the Motorola

Motorola and other US corporations involved in unsuccessful consortia have enlisted the help of the US embassy in Dublin. Mr Dennis Sandberg, the counsellor at the embassy, has written to the Irish department of communications asking it to meet the US companies to

explain why they were unsuc-

Mr Michael Lowry, minister for communications, defended the competition process in the Irish parliament on Tuesday. He pointed out that his department was advised by independent consultants and said there was a "rigorous and completely independent evaluation

of six applicants".

Mr Lowry also pointed out that Motorola and the other US companies - including AT&T, Comcast and Southwestern Bell - had all insisted on their bids being treated confiden-

An EU investigation resulting from the Motorola complaint is not expected to delay the signing of the licence by Esat Digifone later this month. Esat Digisone is 40 per cent owned by Telenor, the Norwe gian state telecoms company and 40 per cent by Esat Telecom, a private Irish telecom-

munications company. The remaining 20 per cent of the company is being offered to private investors through an investment company run by Mr Dermot Desmond, the Irish financier who owns London City Airport.

Persona has also claimed that Esat Digifone is in breach of the terms of the competition because it has not disclosed full ownership details. The has said full details of the consortium's make up will be disclosed before the licence is

> tomer seement. Non-performing loans were

DKr784m a year ago. The bank confirmed its yearend forecast of profits before revaluation of securities and extraordinary items of about DKr600m-DKr750m, after provisions of DKr300m-DKr350m. Earnings on this basis were DKr686m in 1998.

provider of Internet connecquacy ratio at the end of the of which 9.7 per cent was Tier 1 capital, which alone was more than enough to fulfil the legal minimum capital ade-quacy ratio of 8 per cent, the bank pointed out.

Scharing Aktiengeselischaft Berlin

Schering Aktiengesellschuft

The Council of Europe Resemblement Fund for

National Refugees and Over-Population in

Europe Italian Lire 150,000,000,000

Reverse Floating Rate

Nome due 1998

For the Interest Period 30th April, 1996 to 30th October, 1996, the Notes will carry an Interest Rate of 11.97708 per

cent. per annum with an Interest Amount of ITL299,427 per ITL5,000,000 Nore, and ITL 2,994,270 per ITL50,000,000

Note, payable on 30th October, 1996. ated on the Lexembourg Stock Exchange

Company, London Agent Bank

Jyske Bank 'ahead of budget' at DKr148m

By Hilary Barnes

Jutland-based Jyske Bank, which ranks fourth among Danish commercial banks with assets of DKr53bn (\$8.96bn), boosted first quarter pre-tax earnings to DKr221m this year, against DKr148m in the same period in 1995. With a rise in post-tax income from DKr144m to DKr148m, carnings per share were ahead

from DEr17.78 to DKr20.13. The bank, which is the only Danish bank to publish quarterly carnings figures, said the results were ahead of budget.
Despite a decline in
short-term interest rates this

spring, not interest and fee income rose by DKr20m to DKr572m. Advances were up 9 per cent to DKr28.17bn, while deposits grew by almost 4 per cent to DKr38.06bn.

Operating income was not greatly influenced by adjustments for the market value of the securities portfolio, an item that often causes significant year-to-year fluctuations rish banks' results.

The first-quarter securities and foreign exchange revaluation item was a positive DKr52m this year, compared with DKr47m last year, said the bank.

Operating expenses increased by 3 per cent to DKr362m. Loan loss provisions were raised from DKr51m to DKr79m, attributed by the bank to "statistical provisions" on private customers with loans of less than DKr1m, which were increased by Dkr33m to take account of increased lending to this cus-

The bank's earnings, however, are highly sensitive to changes in bond prices and yields. A change of 1 percentage point in average bond yields means a difference of plus or minus DKr100m-DKr150m in the bottom line, according to the bank.

Jyske Bank's capital ade-

Astra sets its sights on further growth

Swedish drugs group sees no merit in the fashion for alliances, writes Hugh Carnegy

r Hakan Mogren is a tall, imposing Swede with a shock of sil-Astra's rejentless rise ver hair whose cheerful demeanour disguises a tough streak - especially when it comes to those who wonder when the spectacular run of success achieved by Astra, maker of one of the world's two biggest-selling drugs, will start to wane. "People say 'trees don't grow to heaven," Mr Mogran, chief executive since 1988, acknowledges with a smile. "They are looking for negative factors about Astra. But I'm sorry.

"Some time in the future.

"Losec is a great product,

Characteristically,

As Astra prepares for a listing next month on the New York Stock Exchange – only the second Swedish company year is set to become the world's biggest-selling prescription drug, Astra's sales growth to do so - Mr Mogren is no less in recent years has risen at more than double the industry deflant about his strategy of maintaining the independence average, and profits growth has for long periods outstrip-ped sales growth. Last year, The group has ridden to the net profits jumped 29 per cent

COMPANIES AND FINANCE: EUROPE

top of the pile of Swedish companies in market value on the to SKr8.8hn (\$1.29bn) on sales back of its blockbuster antiup 28 per cent at SKr35.8bn. But the very strength of Astra's performance has begun ulcer drug, Losec. But it remains a medium-sized force to raise worries among invesin the world pharmaceutical tors about how long it can sus-Nonetheless, Mr Mogren is tain such a record. This year. distinctly unimpressed by the profits are expected to be

damped significantly by the wave of takeovers and mergers sweeping the drug-makers' world. The latest deals have stronger Swedish krona, More fundamentally, Losec's patent protection will run out seen the merger of Switzerland's Sandoz and Ciba to form in 2001 and analysts are con-Novartis and, closer to home, cerned that Astra does not the marriage of Sweden's Pharmacia with Upjohn of have the product pipeline to replace it. There are also worries about

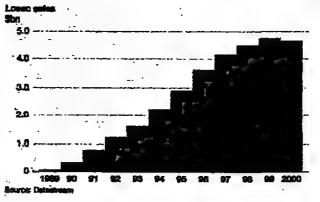
"I cannot understand why new ulcer treatments that may some of these mergers have erode the long-term use of been done," declares the Astra Losec and its rivals. chiaf. His suspicion is that low-growth, high-cost opera-Astra will be a victim of its tors will "mix old problems own success," says a Londonwith new problems and get based pharmaceutical analyst, drowned." who declined to be identified.

Those factors are just not

of Astra.

market.

A company with Astra's high rate of growth does not need such an alliance, he says. "If you are growing at high speed, you can't do mergers and acquisitions at the same time." Thanks to Losec, which this



"Of course, a product like Losec is a once in a lifetime product. But we strongly believe that the sum of all our other products is going to give us volume increases in the future matching what we have had with Losec."

Before that happens, however. Astra expects a great deal more in performance from Losec. The drug has won a 40 per cent market share in Europe, just over 25 per cent in the US (where it is now sold through Astra-Merck, a joint venture with the US company) but only 5 per cent in Japan.

Underlying sales growth in the US is running at a rate of some 40 per cent a year. Mr Mogren says Losec has to date fulfilled only between one-third and one-half of its market potential. He also argues that market

worries about changing treatments of ulcers are misplaced. In the lower intestinal tract, the discovery that a bacterium called helicobacter pylori was a cause of peptic ulcers has led to a breakthrough where the ulcers can now be eliminated quickly through the combination of Losec and antibiotics.

but we have seen in the past that companies with such suc-This has caused some to cessful drugs cannot replace question whether Losec will, erefore, start to eat into its Mr own potential as a long-term Mogren has a robust riposta. chronic treatment. But Mr



nation in the US. However.

sales begin to slow. Astra has,

therefore, moved to expand

greatly its research and devel-

opment effort to increase the

llow in its product pipeline.

Most notably, it bought the

R&D operations of the UK's

Altogether, Astra's R&D bud-

Fisons last year for SKr2.4bn.

get will reach SKr7bn this Mogren says that the new treatment offers "enormous" year, a 75 per cent increase new potential for Losec. And, over two years ago. Mr Mogren says Astra has as he says, upper tract ulcers are many projects in the vital not caused by the bacterium, which means long-term treatand expensive - clinical phase

ments will still be needed for of development as in the preclinical stage. As well as projects in its four But what has Astra got in the product pipeline to support core areas, Astra is working on Mr Mogren's bold assertion potential treatments for centhat the company will have the iral nervous system disorders. such as strokes, and is looking drugs to secure its post-Losec

to other areas such as immuno-Of Astra's three core areas But the company's R&D apart from gastro-intestinal treatments - respiratory, carspend as a proportion of its dio-vascular and pain control sales is only now coming up to

treatments - the biggest sucindustry averages. "Mr Mogren's statement cess to date is for Pulmicort, an anti-asthma therapy about future volumes implies increasingly administered by far more breadth in their pipe-Astra's Turbuhaler inhalation line than is visible at the device. Pulmicort sales rose 17 moment. It is a very confident statement," says the Londonper cent last year to SKr4.3bn.

based analyst.
Confident is certainly a word stra is keenly awaiting A approval for the Pulmi-cort-Turbubeler combithat applies to Mr Mogren. The market may speculate that Astra would be a perfect part-ner for most of the world's top Pulmicort on its own will not 10 pharmaceutical groups. take up the slack when Losec

But with an expensive price tag and a core shareholder in the Wallenberg empire, Astra is not an easy takeover target. And Mr Mogren is not looking for a merger. His sights are set on more growth. "The distance is very large," he says.

Tele Danmark in Internet expansion

telecoms group, said it was launching a Danish electronic marketplace on the World Wide Web that would ease access to the Internet and raise the number of Danish users by hundreds of thousands by the end of 1997, reports AFX News

About 2 per cent of Denmark's 2:4m households now have access to the Internet, and growth is hampered by the fact that ordinary users find the interface complicated, it

Internet access is still limited to those with a special com-puter interest," the company

Payment of Dividend

Coupons should be lodged with:-

from whom appropriate claim forms can be obtained.

Temple Court

Mortgages (No. 1) PLC

£175,000,000

Mortgage Backed Floating Rate Notes 2029

The rate of interest for the period 30th April, 1996 to 31st July, 1996 has been fixed at 6.32292 per cent. per annum. Coupon No. 26 will therefore be payable on 31st July, 1996 at £158,94 per coupon.

S.G.Warburg & Co. Ltd. Agent Bank

Coupons will be paid at the rate of exchange on the day of presentation.

Tele Danmark, the Danish access to 40 Danish companies and services including banks and newspapers, and various public services, for DKr25 (\$4.23) a month.

For a further DKr40, users can have full access to the World Wide Web with their own address. The package includes a Danish version of Netscape software and quartarly CD-Rom update, it said. In its 1985 report, Tale Danmark said it was the largest

tions in Denmark.

• Mr Hemjoe Klein, chief sion of Lufthansa, the German airline, said 1995 passenger numbers grew 7.9 per cent and said. its load factor grew by 1.6 per-lts new CD-Rom product, centage point, reports Reuter Opasia, will offer simplified from Hong Kong.

SCHERING

NOTICE IS HEREBY GIVEN to shareholders that following a resolution passed at the Annual General Meeting of shareholders held on 30th April, 1996 a Dividend for the year ended 31st December, 1995 will be paid, as from 2nd May, 1996 at the rate of DM 1.55 per share of DM 5 nominal against presentation of Coupon No.61.

All payments will be subject to a deduction of German Capital Yields Tax at 26.875% (25% plus 7.5% "Solidarity Surcharge" on the Capital Yields Tax).

Paying Agency, 2 Finsbury Avenue, London EC2M 2PP

United Kingdom Income Tax will be deducted at the rate of 5% unless claims are accompanied

German Capital Yields Tax deducted in excess of 15% is recoverable by United Kingdom residents. The Company's United Kingdom Paying Agent will, upon request, provide shareholders or their agents with the appropriate form for such recovery.

S.G. WARBURG & CO. LTD.

Orange plc



Global Offering of 357,500,000 Ordinary Shares

in the form of Ordinary Shares or American Depositary Shares

Joint Global Coordinators and Joint Bookrunners

Goldman Sachs International

Dresdner Bank-Kleinwort Benson

European Offering

178,750,000 Ordinary Shares

This portion of the offering was offered to institutional and certain other investors in Europe (including an offer to the public in the United Singdom).

Dresdner Bank-Kleinwort Benson

Goldman Sachs International

ABN AMRO Hoare Govett

NatWest Securities Limited

Cazenove & Co.

Credit Lyonnals Securities

HSBC Investment Banking

This portion of the offering was offered in the United States and Canada.

North American Offering 143,000,000 Ordinary Shares

Goldman, Sachs & Co.

Kleinwort Benson North America, Inc.

Donaldson, Lufkin & Jenrette

Lehman Brothers

Merrill Lynch & Co.

CIBC Wood Gundy Securities Corp.

Cowen & Company

J.P. Morgan & Co.

Gordon Capital Inc.

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Alex. Brown & Sons

Wasserstein Perella Securities, Inc.

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Hoak Securities Corp.

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This portion of the offering was offered outside of Europe and North America.

Dresdner Bank-Kleinwort Benson

Goldman Sachs (Asia) L.L.C.

HSBC Investment Banking

Nikko Europe Plc

Rest of World Offering

35,750,000 Ordinary Shares

Peregrine Capital Limited

April 1996

COMPANIES AND FINANCE: THE AMERICAS

US insurers weather the storm

in New York

An increase in weather-related losses failed to dent the growth in operating income at two of the US's biggest insurance groups, CNA Financial and

> months of this year. The two companies, which have been at the centre of the restructuring under way in the US property/casualty insurance industry, each suffered the effects of the severe weather which hit large parts of the US last winter.

Cigna, during the first three

However, their latest results also reflect the overall improvement in earnings at US insurers which has followed the recent wave of restructurings and mergers, as well as improving conditions in the commercial insurance markets after a long period of margin

The solid operating earnings reported by these and other big US property/casualty insurers for the opening months of this year follow the most successful year on record for the indus-

try.
Thanks to the absence of big hurricane or other catastrophe es, the industry registered after-tax profits in 1995 of \$20.1bn. This was twice as much as the year before,

performance is always a

tricky business. In Bra-

zil, measuring past perfor-

Balance sheets, even for rep-

utable companies, often con-

tain distortions that only expe-

rienced eyes can identify; some

are undetectable. Now analysts

fear a law change affecting inflation-adjusted accounts

may make many balance

Lafis, a research group, stud-

ied the 1995 accounts of 66

publicly-traded companies.

Using only information in the

balance sheets, it made its own

calculations of each company's

net profit or loss by separating

extraordinary items from the

company's normal activities.

Of the 66, Lafis found that the

true results of 35 companies

were lower than published,

while 13 were higher and only

i changes to

Brazilian company accounts

are peppered with provisions

for future tax payments, and

with reversals of past

But companies are not

obliged to show provisions for

finding taxes on their published

balance sheets - only on their

unpublished statements to the

tax authorities. When a com-

pany reverses a past provision

- an accounting procedure that creates a profit - it can do

so at once, or over several years. Some companies use

these profits to cover up poor

operating performance.
"What companies are doing

is absolutely and definitely

within the law," says Mr

Carlos Yamashita, also of

"They may, and in some

18 were the same.

sheets virtually meaningless.

mance is no easier.



CNA is controlled by the Lowes group of Mr Larry Tisch

Brazil groups create results jungle

Legislation and tax disputes confuse analysts, says Jonathan Wheatley

according to figures compiled in an initial public offering last by the Insurance Services

The rebound in earnings, and a renewal in stock market enthusiasm for some insurers, has ensured a strong stock market debut in recent days for Travelers/Aetna. The company was created when Travelers, the US financial services group, merged its property/-casualty operations with those of Aetna, which it acquired for

Just under 9 per cent of the new unit was sold to the public

redicting a company's cases must, include extraordi- accounts but gave them the

nery items in the profit or loss

line. But the law gives them

ability of audited balance

sheets surfaced recently when

two high street banks revealed

significant liquidity problems within days of issuing healthy

Fresh concerns have been

raised by a law passed at the end of last year which deter-

mined, as part of the govern-

ment's anti-inflationary tactic

of removing all indexing from

the economy, that Brazil's securities commission, the

CVM, can no longer force

quoted companies to publish inflation-adjusted accounts.

These expressed results for the past year and, for comparison,

the previous year calculated

according to currency values

at the last day of the last

Severe doubts about the reli-

room for manoeuvre.

results

week, raising \$875m. Yesterday lunchtime the company's shares were trading at \$27%, compared with a launch price of \$25, valuing the company at more than \$10bn.

Net income at both CNA Financial, which reported results yesterday, and Cigna, which reported late on Tuesday, were distorted by investment gains. CNA, an insurance company

which is controlled by Mr Larry Tisch's Lowes group, bought the struggling Conti-

option of continuing to publish

fallowed us to compare apples

with apples," says Mr Ivan Clark, a partner at accountants

Price Waterhouse in São Paulo.

"But even inflation of 10 per

ne example is the pet-

rochemicals company

Copene, which pub-

cent or 15 per cent a year accu-

lished results for the first quar-

ter of 1996) according to both methods. One set, which ignored 3.5 per cent inflation

during the period, showed pre-

tax profits of R\$23.3m

(US\$23.6m). |The second,

which allowed for inflation's

effects, showed profits of

mulates very quickly."

The previous system

corrected accounts as well.

nental insurance company a year ago, making direct comparisons with a year before difficult

Overall, CNA reported net income of \$329m, or \$5.30 a share, on revenues of \$4.3bm. That compared with after-tax profits of \$153m, or \$2.44, on revenues of \$3.1bn the year

The insurer's earnings were lifted by substantial investment gains, which accounted for more than half its earnings per share for the period. While earnings from the property/casualty business rose to \$152m for the period, from \$118m a year before, pre-tax investment gains jumped to \$305m, from \$28m.

Cigna registered after-tax profits of \$238m, or \$3.10 a share, down from \$290m, or \$4, from the previous year.

The company's operating income, though, climbed 50 per cent to \$219m, largely due to a turnround in its domestic prop-erty/casualty business and an advance in its profitable international operations.

Cigna won approval earlier this year for a controversial restructuring of old environmental and asbestos liabilities. This move which was intended to help restore the health of the group's property/casualty

room for confusion. In the past,

accounts were adjusted accord-

ing to the government's official

index, known as the Ufir. The

Ufir, however, is being phased

out. Now companies must

decide for themselves whether

to adjust their results in line

with the US dollar, or with any

one of the many other inflation indices available.

Not all companies will do so. WEG, a maker of electric

motors, announced it would only publish unadjusted

results. Mr Alidor Lueders

finance director, says that annual inflation of less than 20

per cent will have little impact

Analysts say other compa

nies will follow WEG because

adjusted accounts are very

close to the management

accounts which companies use

when making operational deci-

Not publishing adjusted fig-

ures will reduce the amount of

strategic information available

This year sees an additional

complication. At the end of last

top rate of corporate income

tax | from 43 per cent to 25 per cent. But, by simultaneously ending inflation-adjusted tax

accounting, it ended the prac-

tice by which companies used

to correct the values of their

In the past, a company

whose net worth exceeded

fixed assets would see its tax

base reduced. That will no lon-

ger happen, so capitalised com-

panies will tend to fare worse

under the new regime, while

indebted companies will tend

to do better.
In Brazil, where the cost of

borrowing is very high, wellrun companies are usually well

capitalised. For many, the

losses from the end of infla-

tion-adjusted tax accounting

are likely to outweigh the ben-

fixed assets and net worth.

on its figures.

to competitors.

NEWS DIGEST

US chemicals group takes over rival

Uniroyal Chemicals, the speciality chemicals producer, is to be acquired by fellow chemicals group Crompton & Knowles in an agreed deal valued at about \$1.4bn, including debt. Crompton will issue stock worth \$15 for each Unfroyal share, valuing Uniroyal's equity at just over \$200m.

The combined group will have debt of about \$1.1bn. Crompton said it would slash its dividend from the current \$0.54 annually to \$0.05, as a means of paying down debt to the point where the company's debt rating attains investment grade. Uniroyal's shares jumped \$2% to \$14% in early trading while Crompton's rose \$\% to \$16.

The deal marks the end of the company's independence after more than a century. In 1985, Uniroyal, then the third largest US tyre company, put its chemicals business up for sale to help pay down debt acquired in fighting off the corporate raider Mr Carl Icahn. Uniroyal Chemical was bought for \$710m in 1986 by financiers Mr Nelson Peltz and Mr Peter May. In 1989, it was sold to management for \$240m in cash plus the assumption of \$560m in debt. In the same year, the Uniroyal tyre business was taken over by Michelin of France.

With sales last year of \$1.1bn, Uniroyal specialises in agrochemicals and elastomers. Its agrochemicals business has at times proved controversial. In 1999 it withdrew Alar, its best known product used to keep apples fresh, on charges that it might be a carcinogen. Last month, it agreed to withdraw the pesticide propargite from use on 10 crops commonly used

on baby foods, on similar grounds. Crompton & Knowles, the smaller of the two in sales terms, made net profit of \$40.5m last year, down 24 per cent from a peak two years earlier, on sales of \$666m. The company makes dyes, flavours and fragrances, and blow moulding equipment

The combined company will be known as Crompton & Knowles, and will be headed by Mr Vincent Calarco, Crompton

Moody's Investors Service, the credit rating agency, yesterday said it had placed the rating of Uniroyal Chemical on review for potential upgrade. About \$900m of long-term debt securities were affected, Moody's said. Tony Jackson, New York

Air Canada increases loss

Weak domestic markets and the heavy cost of international route expansion deepened Air Canada's first-quarter net loss to C\$96m (US\$70.5m) or 62 cents a share, from C\$88m, or 74 cents, a year earlier. This was on revenues of C\$1.1bn against

The first-quarter normally shows a loss because of seasonal factors. "International profitability will accelerate as new routes are fully established," the group said. "Air Canada will continue to focus on cost reduction and developing higher-margin markets to ensure adequate returns."

Passenger revenues rose 18 per cent overall because of strong international results. International traffic was up 24 per cent and yield increased 3 per cent; domestic traffic rose 11 per cent but revenues only 1 per cent because of fare price wars. Domestic yields dipped 9 per cent. Severe weather also hit

Petrocan considers asset swap

Petro-Canada is considering exchanging some of its interests in Canada's east coast offshore oil fields for assets of one or more international companies. Mr James Stanford, president, seid in Calgary that talks were under way with several unidentified groups but would take several months to complete. He would not comment on reports that one of the companies involved was Norway's Statoil.

Petrocan owns 25 per cent of the C\$7bn (US\$5.4bn) Hibernia project, 200 miles east of St John's, Newfoundland. It is due to come on stream in 1997, with a target production of 135,000 barrels a day. Petrocan also owns part of nearby Terra Nova, planned to come on stream in 2001, producing 100,000 barrels

Disposals deepen Domtex deficit

ninion Textile, the international d producer, said it would post a C\$38.2m (US\$28m) net loss on the sale of its nine Canadian and US yarn plants. The disposal should be completed by the end of June, for net proceeds of about C\$110m.

Including this loss and other special items, Domtex posted a net loss of C\$46.1m or C\$1.13 a share for the third quarter ended March 31, against a profit of C\$10.1m or 22 cents a year earlier, on sales of C\$266m, down 6.6 per cent. The loss for the nine months was C\$53.8m, or C\$1.87 a share, against profit of C\$25.3m, or 58 cents a share, on sales of C\$817m against Robert Gibbens

EDS eyes Roccade

Riectronic Data Systems the computer services consultancy being spun off from its parent General Motors, wants to acquire Roccade, the Dutch state-owned information technology company, Dutch newspapers reported. Discussions with the management of the former state computer centre are due to start next week.

Algemeen Dagblad said the approach was confirmed yesterday by a spokesman from the home affairs ministry owner of Roccade, which is due to be privatised this year. Mr Jos Schoemaker, EDS North Europe vice-president, was reported to have said talks with Roccade management would AFX News, Amsterday

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The chareholders are invited to estend the ANNUAL CIENERAL MEETING which will be held at the Hotel L'Olivier. 140A Route d'Arion, L8008 Strassen at 2.00 pm, on 20th May 1996, with the following agenda:

1. To receive the report of the Directors for the year ending 31st December 1995, 2. To receive the report of the Auditor for the year ending 31st December 1995, 3. To approve the annual accounts for the year ending 31st December 1995.

4. To approve the appropriation of the results, to declare a dividend of DSM 0.34 (34 Plennigs) per share and to fix the date of payment.

5. To grant discharge to the Directors with respect to their duties during the year to 3 ist December 1995,

6. To grant discharge to the Auditor with respect to their duties during the year to 31st December 1993,
7. To increase the number of Directors to 4 (four), 8. To approve the appointment of Mr Andrew McGivent at a B Director of the

THE BOARD OF DIRECTORS

ANZBank

Australia and New Zealand **Banking Group Limited** Australian Company Number 005 357 522 (Incorporated with limited liability in the State of Victoria, Australia) U.S. \$300,000,000

Perpetual Capital Floating Rate Notes For the six months 30th April, 1996 to 31st October, 1996 the Notes

will carry an interest rate of 5.7125% per annum with an amount of interest U.S. \$291.97 per U.S. \$10,000 Note and U.S. \$7,299.31 per U.S. \$250,000 Note, payable on 31st October, 1996. Listed on the Luxembourg Stock Exchange

Bankers Trust Company, London

Union Bank of Norway U.S. \$27,000,000

Subordinated Floating Rate Notes due 2002 In accordance with the provisions of the Notes, notice is hereby given that the Rate of Interest for the three month period ending 30th July, 1996 has been fixed at 7.30% per annum. The interest accruing for such three month period will be U.S. \$9,226.39 per U.S. \$500,000 Note against presentation of Coupon Number 16.

Limion Bank of Switzerland London Branch Agent Bank

26th April, 1996



Agent Bank

eccounting period. The government says such Extraordinary items occur in balance sheets around the accounts are not needed now that monthly inflation has world, but Mr Jorge Kotani of Lafis says they weigh particularly heavily in Brazil because been cut from double digits to about 1 per cent. But observers laws and drawn-out legal dis-putes between companies and performance over time will become impossibly complithe tax authorities, which companies often win. That means

The CVM, which shared these fears, told quoted companies to publish unadjusted R\$43.5m "Analysis must decide which result they think most accurately reflects our performance," says Mr Wong Shin, Copene's financial director.

His argument in favour of the adjusted method is simple: "If you borrow money at 2 per the month is 15 per cent, what is the real interest rate? Two

per cent or 0.5 per cent?" Even if companies decide to publish two sets of results. there will still be plenty of

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Brazilian company results 1995

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efits of lower tax rates. Compabegin next week. He added that EDS had no interest in a nies and investors will have to wait until the end of 1996 to BZW has 38 offices in 30 countries. But it's not just being present in a market that counts. It's the quality of presence we have there

COMPANIES AND FINANCE: ASIA-PACIFIC/INTERNATIONAL

Giordano struggles to control its franchisees

The Hong Kong retailer is in the dark as Chinese authorities force a rash of store closures, writes Louise Lucas

ranchise operators are keeping a close watch on Giordano, the Hong Kong retailer that has suffered a rash of store closures in China. Their concern is to establish whether the closures stem from poor corporate management or over-zealous government bureaucracy.

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The sales leave

Lax management is a charge denied by Giordano, but it is the one preferred by its peers. Pinning the closures on Beijing - even claiming it is punishing the company, still, for the outspoken pro-democracy views of its founder and erstwhile chairman, Mr Jimmy Lai - allows for the possibility that a similar fate lies in store for others setting up franchise operations in China
To date, Giordano executives

claim to be almost as much in the dark as those watching them. They have established that the 11 Shanghai stores. which accounted for 0.9 per cent of the company's net turnover last year, were closed after the franchisee was notified by the Shanghai Administrative Bureau for Industry and Commerce of its power to do so during an investigation of possible illegal actions. Management has still not ascertained the reason behind the other 25 franchised stores closures, 20 of which subsequently re-opened.

Depressing though it may be for the competition, analysts reckon the closures may have a lot to do with doing business in China and controlling franchisees across a sprawling nation where changing goalposts are a fact of life

Mr Kent Chan, analyst at Salomon Brothers, says: "I don't think Giordano has very much control over its franchisees, and that's the whole point of franchises. You have almost no control over them, and that's why the upmarket names don't use them. The amount of controls in the best cases are limited, especially in China."

Another analyst concedes: "Giordano management is very good at working very hard to improve support in China, but I think it might be the case that they are expanding a bit too fast." Mr Chan, of Salomon, notes that the business has grown 30 per cent over the past two years, but no new executives have been brought

franchising in China is the issue, there are ramifications for a host of shops and restaurants operating in the mainland. For example, Theme, a retailer of women's working clothes with around 20 stores in the mainland and ambitious

which earlier this month

with an option to buy a further

18.5 per cent from the chief

executive, Mr Dieter Bock.

Although Anglo has ruled out a general bid for Lonrho, most

analysts believe it is poised to

take control of the mining divi-

sion earmarked for demerger

by Mr Bock. Mr McMahon is adamant

that if Impala can avoid the

commission's censure, Anglo's

ambitions will not obstruct the

merger of Lonrho's platinum

assets. The plans were con-

ceived in 1989, when Impala

took a minority stake in Lon-

rho's Eastern and Western

Platinum mines, a year before

the commission was given

responsibility for vetting merg-

ers between large European

"We've got 27 per cent of the

existing asset, an option over

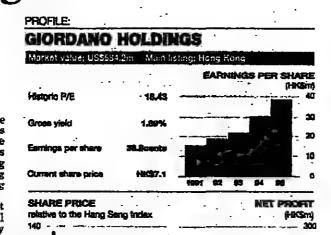
the other 73 per cent and an

agreement to merge. The

merger may be on life support,

He believes the commission's

but it ain't dead."



plans to expand, has made a point of exercising tight control, as well as managing and directly owning all stores in the strategic cities of Guangzhou, Beijing and

Ms Dora Hung, a retail analyst with Kleinwort praises Theme's strategy but agrees franchises are a potential problem. "People are starting to recognise the problem and they are exercising much tighter control. This is a very good lesson for all these people," she says. Another analyst at a

European securities house

notes: "If the Chinese authorities really want to pick on you, they can say they want to do an audit on your books. Value added tax is supposed to be paid every month, but it is almost an honour system. If they don't believe in your books they can carry out an investigation or audit in the shops, and that may mean closing them down."

Mr Lai stepped down as non-executive chairman in August 1994 and in February of this year he severed his remaining ties with the company by selling his final 27 per cent stake in it. Analysts who believe Mr Lai

A diary of problems

August 8 1994: Beijing store closed; follows criticism of Chinese premier Li Peng in Lai's Next Magazine

August 12 1994: Lai resigns as non-executive chairman October 18 1994: China Resources, one of China's leading trading companies and owned by China's ministry of foreign economic trade and co-operation, sells virtually all of its 10.13 per cent stake and withdraws its representative from the board; retains 0.35 per cent October 2 1995: Lai cuts his stake from 36.4 per cent to 27 per cent

February 28 1996: Lai sells his remaining 27 per cent March 1996: Eleven franchised Shanghai stores closed March & April 1996: A further 25 franchised stores closed, 20 of which re-open

is still the crux of Giordano's problems reckon Beljing is convinced he retains an interest in the company, possibly through a nominee or related trust. Says one analyst wryly: "That's certainly not the case, but you cannot control what the Chinese

Brokers are also divided on whether Mr Lai is still the maverick voice he once was, Some say he is still outspoken in Next Magazine and Apple Daily, the Chinese-language newspaper he launched last

authorities think."

But the staple fodder of the newspaper veers much more towards salacious gossip, scandal and horrific accidents: and the magazine, too, has moved far from the days immediately after the Tiananmen Square massacre

Punishment for Mr Lai's views, real or imagined, has never seriously dented Giordano's share price for

TS and European firm fans of Giordano, buying up stock and absorbing placements even after Mr Lai's blistering attack on China premier Li Peng in his weekly Next Magazine resulted in the closure of the Beijing

One broker, who harbours his own suspicions about the bull fervour on the stock, notes: "Hong Kong companies are never the same once the founder gets out, unless you are very lucky. And yet the stock was going up to record levels and institutions went Lai sold out! like lemmines."

Pacific BBA in A\$275m bid to acquire Azon

Pacific BBA, the Australian manufacturing group, yester-day launched a hostile A\$275m (US\$216m) bid for Azon, the former manufacturing division of the Boral building materials group which was floated on the stock market three years ago. The bidder said that merging the two operations should "provide strong growth oppor-

tunities' The larger size would provide a broader revenue base, and allow for the expansion of export-related activities and

offshore operations, it said. The combined group would have annual sales of around A\$780m. and about 6,000

employees. However, Azon told shareholders to take no action, saying that the bid premium offered by Pacific BBA was "considerably less than would be expected in the case of a typical unsolicited offer".

Pacific BBA, which was originally controlled by the UK's BBA group until the parent divested its 58 per cent shareholding in 1993, is offering either one of its own shares and AS1.45 in cash for every two Azon shares, or a straight cash alternative of A\$2.10 per

The cash offer is worth only 10 cents more than the price at which Azon shares were floated three years ago. It is also only a fairly modest premium to the A\$1.90 price at which Azon shares closed on Tuesday night. Yesterday, they ended well above the bid price - at A\$2.21 - suggesting that traders expect a higher offer at

some stage.
Azon is involved in a wide range of industrial products from conveyor belts to insect screening and other wire mesh

Shareholders have had a bumpy ride since the stockmarket debut, with their investment initially going to a significant premium over but then falling back to less than the float price.

Profits after tax in the 1994-95 financial year were A\$24.5m, but the company has warned of a lower figure in the current period.
Pacific BBA, on the other

hand, is mainly involved in automotive components, plastic products, and constructionrelated supplies. It made an after-tax profit of A\$25.3m (before abnormals) in 1995. The company indicated that it expected the current year to

be slightly lower at A\$23.1m. but said the outlook for 1997 suggested around A\$35m.

AirNZ sees Ansett float in a 'few years'

By Nildd Talt

Air New Zealand has confirmed that a flotation of Ansett, the Australian airline. is a possibility in a few years time - assuming its plan to buy a 50 per cent stake in the carrier from Australia's TNT first wins regulatory approval. Mr Jim McCrea, Air New Zealand managing director, raised the idea in Auckland, but suggested that several years' work would be required first.

Under the revised Air NZ Ansett plan, Mr Rupert Murdoch's News Corporation which holds the other 50 per cent of Ansett - is due to acquire all of Ansett New Zea-land. The hope is that it will satisfy New Zealand's competi-tion authorities. Ansett New Zealand is the only leading domestic competitor to Air NZ.

Gold Mines of Kalgoorlie, part of Mr Robert Champion de Crespigny's stable of mining companies, said yesterday it had sold its Jubilee gold opera-tion to Copperfield Gold, a small listed exploration group, for A\$20.5m (US\$16.11m). Part of the payment is in shares, which could give GMK up to 20 per cent of Copperfield's

Broken Hill Proprietary, the Australian resources group, is to carry out a feasibility study on a A\$130m ammonium nitrate plant in Queensland. The proposed plant, which could source its gas feedstocks from the coal-bed methans available from BHP-managed coal leases in the area, would produce about 140,000 tonnes of ammonium nitrate a year. This would used for explosives in mining operations.

Impala intent on leaping European fences

SA group plans to overcome veto of merger with Lonrho platinum arm, says Mark Ashurst



Michael McMahon: 'The merger may be on a life support, but it ain't dead'

ruling was prejudiced by spectalk [over the role of Anglo] has muddled the water." After a four-month enquiry, the nant platinum producers, Impala/Lonrho and Anglo

ulation over Anglo's interest in Lonrho: "Basically, all that court rejected the merger on the grounds that it would create a duopoly of two domi-

concentration and the EU will get excited," Mr McMahon Consequently, Lonrho may review its announcement,

made in the wake of the commission ruling, that it would not join Impala's appeal to the European Court. "Dieter Bock has not said anything. Lourho have got their interests, and

mission's satisfaction, this because that's just another would have been agreed before the ruling. Impala, which is 46.5 per cant owned by Gencor, and Lonrho together supply about 28 per cent of the world platinum market. Amplats' market share is 35 per cent. Russia supplies about 23 per cent, but did not participate in the commission's enquiry.

American's Amplats, which 'I wouldn't like to defy the EC, but I am quite happy to challenge them' - Michael McMahon, Impala chairman

platinum to world markets. When the commission announced its finding last week, it issued a warning that any subsequent attempt by Angle to acquire Lonrho's platinum interests would also be vetoed. "I don't think there are options here that allow Anglo to extend direct influence over Lonrho's platinum division

could restrict the supply of Gencor has its objectives and so does Impala. There is a point at which those interests coincide, and that's the merger." In the meantime, Impala is exploring ways of restructuring the merger or moving it outside the commis-

sion's jurisdiction.
But most analysts believe that if the deal could have been restructured to the com-

debate over the merits of the court's jurisdiction in Africa, which analysts expect will form the basis of an appeal by Impala. The grounds for a challenge to the court's jurisdiction

are largely unexplored. Less than 15 per cent of Impala/Lonrho's annual plati-num production of 1.1m oz would be exported to Europe. well below the 25 per cent

threshold which is one of sev eral criteria governing the commission's intervention. The merger has also been cleared by the South African Competition Board, contrary to a claim last week by the EU competition commissioner, Mr Karel van Miert, that the South African authorities supported its

ruling. In a letter to the European Union dated April 19, the South African department of foreign affairs endorsed the merger and urged the EC to act "on actual cases of collusion" rather than targeting market domination as a potential basis for anti-competitive behaviour. Mr McMahon held four quetings with the court during the attempt to pre-empt its objec-tions. "We offered to make it an indivisible part of the agreement that we would not limit supply. We said 'if we don't do what we have promised we'll do, the EC can unwind the merger." The commission was unswayed.

Both Lonrho and Billiton, a Gencor subsidiary, are based in the UK, although Mr McMahon insists the EC's jurisdiction has "almost nothing to do with the domicile of the companies. They can go right through the corporate world if you or your parent company have got assets in Europe."

Mr McMahon dismisses speculation that when Lonrho's mining division could be listed outside Europe when it is demerged. "Companies who aspire to be international companies cannot delist to avoid the European Commission. But I can structure this transaction such that it falls outside their

Taspen plans to sell half its stake in Barito Pacific

Taspen, one of Indonesia's largest state-controlled pension funds, plans to sell half of its 17 per cent stake in Barito Pacific Timber, the Indonesian logging company which ranks as the world's largest exporter

of hardwood plywood. The finance director at laspen, which does not usually release details of investments, was quoted by the national daily newspaper Bisnis Indonesia as saying that the pension fund wants to sell 100m of the 250m Barito Pacific shares it holds. He did not say would be sold. Mr Rukhiyati Kosasih,

Taspen finance director, said the divestment was motivated by "purely business reasons". adding that Barito Pacific had been exposed to tougher foreign competition in exports of plywood and that Taspen had already sold 25m Barito Pacific shares, reducing its stake to 17 per cent from 17.9 per cent previously. Barito Pacific said last week

that its audited net income in 1995 slumped by more than 50 per cent to Rp70.12bn (\$30m) against a year earlier with high net interest income accounting for about 90 per cent of the pre-tax profit figure. The company has consistently failed to meet its profit forecasts since its initial public offering in 1993.

In addition to reducing its stake in Barito Pacific - which is controlled by Mr Prajogo Pangestu, who has close connections with the

presidential family – Tasper also plans to divest part of its 17 per cent stake in Plaza Indonesia Realty, controlled by President Subarto's second son, Mr Bambang Trihatmodio, and the engineering company Bukaka Teknik

Mr Kosasih said the divestments were not related "to other things", which some analysts interpreted as an that the founding shareholders of the three companies are politically well-connected.

The pension fund's professionalism has been questioned in the past, specifically in relation to a "which amounted to pre-IPO clean-ups of balance sheets, an analyst at a foreign securities house in Jakarta

Prior to Barito Pacific's IPO in 1993, the logging company's founding shareholder was summoned to Indonesia's parliament to explain why Taspen had taken a 20 per cent stake in the company for Rp375bn

The deal valued the company at Rp3,000 a share, compared with the anticipated Rp7,200 price at which the planned flotation was to be set. Taspen is estimated to have

about Rp9,000bn in funds of which, under government regulations, only a limited portion is allowed to be invested in the stock market. News of Taspen's planned divestment caused shares in Barito Pacific to plunge nearly 10 per cent to Rp2,075 in early trading yesterday before recovering to close at Rp2,225.

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Banco Santander to buy out partner in CCH

By George Graham, **Banking Correspondent**

Banco Santander, the Spanish banking group, is to pay DM300m (\$195.6m) to buy out the 50 per cent stake held by its partner, Royal Bank of Scotland, in CC-Holding, parent company of Germany's CC-Bank consumer finance

CC-Bank, largely based in the Rhineland, was one of the venture when Santander and investment in CC-Bank had Portugal and in the Ibos

RBS formed their partnership in 1988.

The two banks each took 50 per cent, but said yesterday that it had gradually become clear that it would be more practical to have a single

Santander offered to buy out RBS's stake in CC-Holding for a price equivalent to 27 times 1995 net earnings of

Mr George Mathewson, chief operations turned into a joint executive of RBS, said the

been a successful one. "We cross-border payments system. believe the price paid is a fair one," he said.

RBS and Santander remain closely linked in other ways, notably through their crossed

Santander now owns 9.9 per cent of RBS, while RBS has been gradually increasing its stake in Santander this year to 4.3 per cent. With the exercise of an option, that is expected to rise shortly to 4.9 per cent. The two are also allied in

CC-Bank's principal line of business is financing sales of around 13,000 car, furniture and electrical equipment

The bank increased its lending volume by 11 per cent last year to DM2.61bn, and its customer deposit base by 20 per cent to DM3.07bn.

RBS will receive DM206m from Santander for its 50 per cent equity holding in CCH. This payment will take the

maturity of 20 years.

The loan notes redeemable after 10 years, but RBS said it had no plans to dispose of them before redemption.

RBS also owns DM94m of loan capital in CC-Holding, which it will sell for cash, plus accrued interest.

The sale is expected to improve RBS's tier 1 capital ratio, which stood at 6.3 per cent at the end of November form of loan notes, guaranteed 1995, by around 30 basis points.

by the Spanish bank, with a It will improve the bank's overall capital ratio, 10.3 per cent at the end of November, by 10 basis points.

RBS is due to report its interim results for the six months to the end of March next week.

They are expected to have suffered from a downturn in profits at Direct Line, the bank's insurance subsidiary. which has been hit by the rising cost of claims and by fierce competition over

Morgan Grenfell's deal-making

expertise and trading systems are developed further. Mr Kop

per intends investment bank-ing eventually to provide a

B satisfy their domestic customers and trim their high domestic cost base

by moving deeper into elec-

tronic banking. Vereinsbank has just opened its Advance

Bank to appeal to customers

wanting sophisticated cash

management and mutual fund

advice without the inconve-

nience of going into a branch. Other big banks have also

some down the direct banking

route, although Dresdner Bank

is waiting to see how the mar-

have a concept in the drawer

and I am certain they will do it," says Mrs Winkler. "But

they will wait until the time is

ripe." Dresdner is concerned

that the costs of acquiring new

direct banking customers, who can easily switch loyalties, out-

weigh the advantages. Whichever combination of

electronic services, investment

banking activities and corpo-

rate finance and treasury busi-

ness German banks choose,

costs will remain high. Banks

are trying to rein back spend-ing growth, weighing the bene-

fits of innovation against the

shareholder value, they have committed themselves to keep-

ing this balance as fine as pos-

sible. Investors will watch

closely to see they do not trip.

By embracing the idea of

need for cost control.

anks are also striving to

third of profits.

Lawyers strive to keep parts of Bremer Bremer afloat

By Michael Lindemann in Bonn had not been able to meet the conditions of the Vergleich

Bremer Vulkan, Germany's largest shipbuilder, yesterday pay back 35 per cent of what it said it was bankrupt after it failed to reach an agreement with creditors.

However, lawyers who have been trying to keep the 102year-old company afloat since February said three ships were still being built at yards in Bremen and Bremerhaven, the two north German towns where the group is based, and that they were also in talks to build further ships which could be built by parts of the group not yet bankrupt.

Meanwhile the city state of Bremen, which had extended guarantees of DM900m (\$587m) to the company because it was the region's biggest employer, yesterday warned that DM300m of those loans might not be recovered.

Bremen is already the most

heavily indebted of Germany's 16 Länder or states. A consortium of more than 30 banks, led by Commerzbank, Dresdner Bank and Bremer Landesbank, is owed a further DM2.9bn. Mr Jobst Wellensiek, the lawyer who has been handling the rescheduling of the compa-ny's debts, said Bremer Vulkan

also talking to a number of companies about the sale of Atlas Elecktronik, the Bremer Vulkan electronics subsidiary. Mr Udo Wagner, who took over as Bremer Vulkan chief executive in February, yesterday left the group, saying there was nothing more he could do now that bankruptcy proceed ings had been opened.

which requires a company to

Bremer Vulkan would only

have been able to pay back 1000 per cent of its debts in that

period, Mr Wellensiek said. 9

adding that the company had "

assets of DML11bn and liabili-Ta

The bankruptcy affects the group's headquarters in Bre 16

men and three subsidiaries -

Vulkan Schiffbau Verbund

employ about 4,200 people.

Vulkan Werft and Schichau 62

Seebeckwerft - which together

There is a possibility a number of other shipbuilding subsidiaries, including Lloyd Werft and Geestemetallbau, as

could survive, according to

another lawyer handling the

Vergleich for these companies.

Mr Wellensiek said he was 75

owes within 18 months:

ties of about DM2.5bn.

Poland to cut coal production by 18%

By Christopher Bobinski

The Polish government yesterday approved a coal industry restructuring programme that is aimed at cutting output from last year's 185m tonnes to 110m tonnes in the year 2000 while increasing productivity by 25 per cent by the end of the century. The plan, for what is now

Europe's largest coal producer, also means the loss of 80,000 jobs in an industry that expects to be employing 174,000 people within five years.

The move is to be underpin-

ned by 4.5bn zlotys (\$1.8bn)

worth of subsidies over this period, said Mr Klemens Scierski, the industry minister. The funds are to go on new equipment, unemployment payup to 20 pit closures. The industry also hopes to cap its debt at its present 8bn zlotys. 21 Mr Jerzy Markowski, the deputy industry ministeric responsible for mining, is. promising a return to profit. ability by 1996 for the industry.

which is expecting to report a 2.7.740m zlotys loss this year. At the same time the government has told the industry that domestic coal prices should rise no isster than inflation.

An invitation to lend an ear to the talking banks

Investors have welcomed the greater openness of German financial institutions, writes Andrew Fisher

be tight-lipped about their financial performance, revealing only the most basic figures. Now, however, they are becoming positively

Terms such as shareholder value, return on equity and international accounting standards trip off executives' tongues as if they had been learnt from childhood.

Not that these concepts were previously unknown. It is just that the hig German banks are taking to them with a wholeheartedness that would have been unheard of a few years

As a result, analysts have been confronted with a welter of new data in the latest reporting season, in which profits were markedly better than in the lacklustre year of 1994. Deutsche Bank disclosed its hidden reserves; Dresdner Bank did the same, and added its property assets for good measure: Bayerische Vereinsbank gave a sectoral breakdown; and Commerzbank gave divisional profits. Banks also gave detailed information about risk provisions.

Deutsche Bank led the way among German banks by moving to international accounting standards (IAS). The idea is to give shareholders a greater insight into its financial performance, making it easier to raise money on international capital markets. "In our information society, there is demand for intelligent openness," said Mr Jürgen Krum-now, a director of the bank.

Deutsche Bank revealed hidden reserves of DM20bn (\$13bn), representing the difference between the book value of its myriad shareholdings in companies such as Daimler-Benz and Allianz insurance and their market value.

Mr Hilmar Kopper, chair-man, said the decision to move to IAS - which is less conservative than the creditororiented German system and allows closer comparison with foreign banks - fitted its global strategy. "The aim is full disclosure of our figures and tar-

Other banks are following. although not so enthusiastically or comprehensively. Dresdner Bank said its hidden reserves were DM9bn, or DM17bn if property and other holdings were included. Commerzbank declined to give this figure, but has provided more details of regional and divisional activities.

One disturbing aspect of the banks' performance last year was the weak domestic showing compared with the more dynamic trend abroad. The tough domestic market, with the economy slack and interest rate margins flat, continues to hamper profits growth in 1996.

Banks are cautious about the rest of the year. "All banks said uni sono that the first two months were very good," says Mrs Christine Winkler, bank-ing analyst at Bayarische Hypotheken-und Wechsel-Bank. "But they warned against extrapolating from this In spite of the mixed picture

ment economical in metter of record only insued by Morgan Granfell & Co. Limited, which is regulated by the Seo

DM 1,000,000,000

200,000 Bonds of DM 5,000 each

Deutsche Bank

exchangeable into Shares of

Date of issue: May 2, 1996 Issue price: 86.64% Conversion premium: 25%

Deutsche Morgan Grenfell

Yield to maturity: 4%

Deutsche Bank Aktiengesellschaft

Bayerische Vereinsbank AG

CS First Boston Effectenbank

Goldman, Sachs & Co. oHG

Morgan Stanley & Co.

unconditionally and irrevocably guaranteed by

German banks are revealing, their greater openness has markets. "I think investors respond well to having the extra information," says Mr John Leonard, banking analyst at Salomon Brothers in London. He also thinks banks' increased concentration on shareholder value - involving more effective use of assets, closer attention to costs and awareness of the need to earn better returns - is positive.

than lip service here." This means more disclosure in difficult times as well as good, Mr Leonard adds. "Once they've taken the step of opening up, they'll have to stay open. So if things deteriorate they can't just paper this

We're talking about more

German banks will certainly have to look to their laurels if the competitive threat highlighted by the attempt of CS Holding of Switzerland to merge with UBS becomes a reality. Although this failed, the prospect of a big new rival across the border sent a frisson through the German banking

The talk in Garman banking circles is of possible amalgamations or even takeover moves by Swiss institutions in Germany. Commersbank, the third-largest German bank, is regarded as a likely object of Swiss interest or as a possible candidate for a merger with one of its domestic competitors. At this stage, however, there is

Innovation in the German

Deutsche Finance (Netherlands) B.V.

1% Deutsche Mark Global Bonds of 1996/2001

Allianz Aktiengesellschaft Holding

UBS Schweizerische Bankgesellschaft

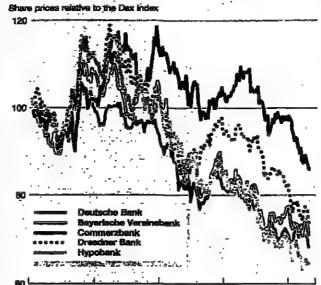
Dresdner Bank-Kleinwort Benson

Commerzbank

Deutsche Morgan Grenfell

equity-linked market

German banks underperform



How the big German banks fared last year

	Operating profits*	Net Income
	DM bri %	DM bn %
Subscriet Clarker	2 2 42 4	2.10 +24**
resdner Bank	1.99 +22	1.21 +17
oune was	146	0.98
ayerische Vereinsbank	1.38 +30	0.86 +16
ayedsobe (typu Bask	- 38 JH	- 0.88 +30
fter sisk provisions — on LAB (c	terretional accounting atenderic	besid Source: banks

more speculation than action. But the events in Switzerland showed the need for German banks to reinforce their competitive position. Spearheaded by Deutsche Bank, they

have been moving into investment banking and asset management. Deutsche Bank plans to raise its spending on the DM700m this year as Deutsche

ECU 450,000,000 Floating Rate Notes due 2002

In accordance with the provisions of the Notes, notice is hereby given that the Rate of Interest for the three month period ending 30th July, 1996 has been fixed at 3.65405% per annum. The interest accraing for each three month period will be ECU 46.31 per ECU 5.000 Bearer Note, and ECU 926.19 per ECU 100.000 Bearer Note, on 30th July, 1996 against presentation of Coupon No. 17. Union Bank of Switzerland London Branck Agent Bank 26th April, 1996

ANZBank ralia and New Zeala Benking Group Limited ACTN 005-557-522 6 with Present Balletty in the New £200,000,000 ng Rate Notes due 1997 Payment of Dividend

NOTICE IS GIVEN to shareholders that following a resolution passed at the Annual General Meeting of sharebolders beld on 30 April, 1996 a dividend for the year ended 31 December, 1995 of DM 13 per share of DM 50 par value will be paid as from 2 May, 1996 against delivery of Coupon No. 19 from shares of DM 50 or Coupon No. 10 from London Deposit Certificates of

Dividend of 20 % will be subject to German Capital Yield Tax of 25 % and 7.5 % solidarity payment charged on the capital

Coupons may be presented as from 2 May, 1996 to

S. G. Warburg & Co. Ltd. Paying Agency 2 Finsbury Avenue London EC2M 2PP

from whom appropriate claim forms can

The dividend will be paid at the rate of exchange ruling on the day of payment.

Payments in respect of London Deposit Certificates will be made at the rate of exchange ruling on the day of receipt of dividend on the underlying shares deposited

United Kingdom Income Tax will be deducted at the rate of 5 % unless claims are accompanied by an affidavit.

German Capital Yield Tax deducted in excess of 15 % is recoverable by United Kingdom residents, and the Company's United Kingdom Paying Agent will, upon request, provide holders with the appropriate forms for such recovery.

Hoechst Aktiengesellschaft Frankfurt am Main, May 1996

Hoechst 🕝

US\$40,000,000 4% BONDS DUE 2001 (the 'Bonds')

TUNG HO STEEL ENTERPRISE CORPORATION
(Incorporated as a company limited by sheres in Triwan, Republic of China)
(the 'Company')

NOTICE TO HOLDERS OF

(the Company,

NOTICE IS HEREBY GIVEN to holders of the Bonds (Bondholder') that
any Bondholder may, in accordance with Condition 7(D) of the Bonds, by
completing, signing and depositing, at the office of any Psying Agent specified
below, a notice for redemption, in the form obtainable from a Psying Agent

Line has May 27, 1996 and no later than June 14, 1996, require the no earlier than May 27, 1996 and no later than June 14, 1996, require the Company to redeem on July 26, 1996 all or some only of the Bonds held by such Bondsoider.

Any such notice of redemption will be irrevocable and will bind the Company, upon surrender by the Bondholder of the Bond or Bonds to which such notice relates at the specified office of the Paying Agent with which the notice of redemption was deposited, to redeem such Bonds at a rademption price of 121.891% of the principal amount of such Bonds together with actrued interest to the date of redemption. Principal Paying Agent

Citibank, N.A. 336 Strend London WC2R 1HB

Paying Ages Bahahofstrasse CH-8021 Zurich

CITIBANCO

Residential Property Securities No.4 PLC

£290,000,000 £180,000,000 Class A1 Notes Class A2 Notes

Mortgage Backed Floating Rate Notes due 2023 in accordance with the provisions of the Notes, notice is hereby given that for the three month period 30th April 1996 to 31st July 1996, the Class Al Notes and Class A2 Notes will carry un interest rate of

6.22031% and 6.29531% per amum respectively. The interest payable per £100,000 Note will be £975.76 for the Class Al Notes and £1,582.43 for the Class A2 Notes.



THE TOP OPPORTUNITIES SECTION

For senior management positions. For information please contact:

> Robert Hunt +44 0171 873 4095

iursday may 2 1994

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COMPANIES AND FINANCE: UK

BAT advances 10% helped by financial side

By Roderick Oram Consumer Industries Editor

BAT Industries reported underlying first quarter profit growth of 10 per cent with its tobacco businesses performing slightly worse than forecast and its financial services mar-

Including a £34m gain on the sale of a Chilean food business, pre-tax profits rose 16 per cent to £600m. "This is a very steady start to 1996," said Mr Martin Broughton, chief executive. Some analysts slightly shaved their year-end forecasts to about £2.55bn, against nor-malised profits of £2.44bn. Details of a previously

announced reorganisation of its financial services arm. including Allied Dunbar, Eagle Star and Farmers, was likely to therge in the second half, Mr Broughton said.

Financial services trading profits rose 2 per cent to £255m with general insurance, life and investment businesses slightly ahead. Good growth from Farmers in the US compensated for lower UK profits from Eagle Star (£31m, down 23 per cent) and Allied Dunbar (£46m, down 15 per cent).

loss doubled to 247m mainly

because of bad weather and competition in car insurance. An £18m rise in investment

returns to £72m, however, soft-ened Eagle Star's profits fall. Allied Dunbar's new business premiums rose 31 per cent as confidence among consum ers and distributors continued to recover gradually. Total premium income was up 16 per cent at £402m.

Tohacco trading profits were up 9 per cent at £358m thanks to cigarette volumes rising 4 per cent and exports 6 per cent. Profits at Brown & Williamson, its US subsidiary, were up 9 per cent to £156m but its mar-

ket share slipped one percentage point to 17.5 per cent. BAT said it was experiencing no adverse impact from tobacco litigation in the US. Its proposed sale of minor brands to Lorillard, however, has been

blocked by US regulators. Profits in Germany were hurt by increased marketing expenditure and folling volumes. Other, lower markets included Russia and Hungary. Profits in Brazil were slightly

On the positive side, Australia was beginning to recover, export volumes to China were Eagle Star's underwriting up by £1bn and Asian markets oss doubled to £47m mainly generally grew well.

Advance limited by £5.9m restructuring charge

Acquisitions behind Danka's rise to £53.9m

By Geoff Dyer

Acquisitions helped Danka Business Systems, the fastgrowing office equipment sup-plier, to improve annual profits y 19 per cent from £45.4m to £53.9m (\$81m). Turnover jumped 54 per cent to £793m (£516m), with about 50 acquisitions the group made over the

year adding £183m to sales. The shares, which rose strongly before the results, fell 6p to 792p, although the figures were in line with forecasts. Analysts said there had been some profit-taking Operating profits increased 38 per cent to £69.2m (£50.3m),

acquisitions including Octo-ber's £109m purchase of Netherlands-based Infotec. Profits were held back by £5.9m exceptional charge for restructuring recently acquired international businesses and a further £1.2m charge for the

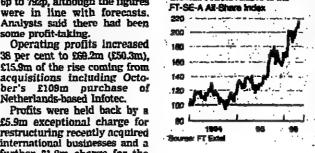
early repayment of borrowings.

Mr Mark Vaughan-Lee, chairman, said there was still considerable scope for further acquisitions which would add at least 15 per cent to annual turnover for the next three years. The group's market PROFILE

DANKA BUSINESS SYSTEMS

£115m £186.3m £347.2m £515.7m £793.0m Pre-tax profit £10.8m £17.5m £32.0m £45.4m £60.9m 10.6p

Dividend per ahare* " 0.9p 1.19 1.5p



SHARE PRICE relative to the

share was only 6 per cent in the UK, 3-4 per cent in North America and 2 per cent in continental Europe, he said. The group has drawn \$110m. (£72.8m) from a new \$400m bor-

rowing facility negotiated in

February. Due to goodwill

write-offs from acquisitions, it had net assets at the year end of £11.8m (£24.6m). Under US accounting rules, where goodwill is written off through the profit and loss account, net earnings increased 16 per cent

Pet Plan sold to Cornhill for £32m

By Raiph Ations, Insurance Correspondent

The two founders of Pet Plan, who each invested £250 in the animal health insurer 20 years ago, have sold the group for £32.5m (\$49m).

Ms Patsy Bloom, the former secretary who founded Pet Plan, and business partner Mr David Simpson each realised about £16m as a result of the sale to Cornhill Insurance, the UK subsidiary of Allianz, the large German ins

The deal follows of two decades of galloping growth for Pet Plan, the UK's largest horse insurer, after Ms Bloom spotted an opportunity for pro-viding protection against high veterinary bills.

Pet Plan has 400,000 policy holders, covering dogs and cats as well as borses. Its premium income is about £40m

The sale came as Churchill, the UK telephone-based motor and household insurance arm of Swiss insurer Winterthur, and Direct Line, the telephone based company, announced plans to enter the animal

LEX COMMENT UK textiles

Yesterday's profits warnings from Courtaulds Textiles, its UK textile industry second in five months, was depressingly familiar. Over the past 10 years, investors in textiles have lost their shirts. The sector has underperformed the market average by nearly 60 per cent. The market capitalisation of all 60-odd quoted textile stocks now adds up to only £4.6bn - the size of one mid-dle ranking FT-SE 100 company. The reasons are not hard to find. Clothing con-sumption has declined as a

Textiles and Apparel relative to the All-Share (FT-SE-A indices) 100 1986 88 90 92 94 96 proportion of disposable

income, from 7 per cent in 1975 to less than 5 per cent now; and clothing prices have lagged behind inflation over the same period. Competition from countries with lower labour costs has steadily intensified and last year the industry had to cope with unusually warm weather and wild swings in raw material

That does not mean there are no textile companies in which it is worth investing. Those, like Dewhirst, Claremont and Sherwood, which have been fleet of foot in moving production offshore while cutting costs in the UK have consistently pro duced returns on capital of 20 per cent or better. But the sector's performance has been dragged down by the bigger companies - Coats Viyella, Courtaulds Textiles and Dawson International - which have been much slower to react. Dewhirst and Sherwood source nearly 50 per cent of their lingerie and garments from overseas. For Courtaulds, the comparable figure is 12 per cent and at Coats it is even lower. With the threat of a minimum wage and the gradual phasing out of quotas on imports, the big UK manufacturers have their work cut out for them.

Courtaulds Textiles

business was likely to make a "small loss" in the first half.

in continental Europe were softer than expected.

Margin pressure from raw

Shares in Courtaulds Textiles, the UK's second largest clothing and fabric manufacturer, plunged more than 10 per cent

casts from £45m to £40m as the group, which suffered a 12 per cent fall in 1996 pre-tax profits to 240.4m, told its annual meeting that sales in the US were down 30 per cent year-on-year

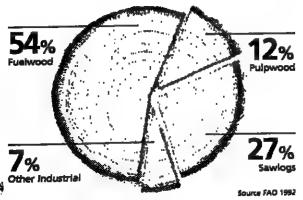
The shares fell 45p to 373p. The group said lece markets

material price rises in 1994 and 1996 were forcing it to follow rivals in raising the proportion of garments made outside the UK in the lower-wage economies of Asia and North Africa.

warns as US sales fall

yesterday as the group warned of a severe drop in US sales would cause interim profits to fall "substantially below" last year's level. Analysis cut their 1996 fore-

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BOXMORE INTERNATIONAL PLC

ction to the Official Lists Credit Lyonnais Laing

£3,554,333.80

BAT INDUSTRIES

"Steady progress in 1996"

Three months unaudited results to 31 March 1996

PRE-TAX PROFIT

Captinity its particular con-

£600m

+16%

EARNINGS PER SHARE

11.6p

+17%

- Pre-tax profit up by 10 per cent on an underlying basis, excluding the £34 million profit from the sale of the Group's food operations in Chile.
- Financial services profit up 2 per cent at £255 million. Good performance from Farmers and encouraging trend in UK life, but UK underwriting results deteriorated in the general business.
- Tobacco profit up 9 per cent at £358 million and volumes up by 4 per cent against last year's strong first quarter. Sales of both US and UK international brands once again made good headway.
- "In terms of the year as a whole, we anticipate making steady progress in 1996. This should enable us to continue to reward our shareholders with long term superior total returns."

Lord Cairns, Chairman

The full quarterly report is being posted to shareholders and copies are available from the Company Secretary, B.A.T Industries p.l.c., Windsor House, 50 Victoria Street, London SW1H ONL.

REPUBLIC NEW YORK CORPORATION SAFRA REPUBLIC HOLDINGS S.A.

Consolidated Statements of Condition and Summaries of Results

These statements and summaries represent the consolidated accounts of Republic New York Corporation and its wholly owned subsidiaries and of Safra Republic Holdings S.A. and its wholly owned subsidiaries. Republic New York Corporation owns 49.2% of Safra Republic Holdings S.A., which is accounted for by the equity method.

	REPUBLIC NEW YORK CORPORATION			HOLDINGS S.A.		
	March 31,		March	131,		
	1996	1995	1996	1995		
Assets		(in thousands of USS	except per share date)			
Cash and due from banks Cash and due from banks Interest-bearing deposits with banks Precious metals Investment securities Trading account assets	\$ 747,767 6,003,656 1,145,745 19,301,429 3,580,673	\$ 808,158 8,489,948 1,493,440 11,426,425 4,310,232	\$ 36,176 5,777,815 	\$ 52,561 6,131,528 		
Federal funds sold and securities purchased under resale agreements	890,924 11,062,712 (339,209)	2,399,383 9,057,636 (318,138)	1,423,509 (129,537)	1,302,712 (137,321)		
Loans, (net)	10,723,503 4,750,562 \$ 47,144,259	8,739,498 4,681,131 \$ 42,348,215	1,293.972 473,443 \$ 15,676,503	1,165,391 392,953 \$ 13,586,530		
Liabilities: Total deposits. Trading account liabilities Short-term borrowings. Other liabilities Long-term debt Subordinated long-term debt and perpetual capital notes	\$ 29,106,509 3,157,109 4,053,311 3,892,478 1,499,037 2,406,463	\$ 23,301,948 4,135,576 4,458,989 3,621,327 1,767,119 2,406,279	\$ 12,077,857 93,215 1,367,562 472,332 175,000	\$ 10,310,536 157,655 1,046,829 325,504 430,000		
Shareholders' Equity Cumulative preferred stock Common stock and surplus, net of treasury shares Retained earnings Net unrealized appreciation (depreciation) on securities available for sale, net of taxes	575,000 843,891 1,702,801 (92,340)	672,500 693,224 1,533,943 (242,690)	889,232 601,076 229	905,042 526,639 (115,675)		
Total shareholders' equity	3,029,352	2,656,977	1,490,537	1,316,006		
Total liabilities and shareholders' equity Book value per share	\$ 47,144,259 \$ 44.03	\$ 42,348,215 \$ 37.97	\$ 15,676,503 \$ 84.65 \$ 7,369,467	\$ 13,586,530 \$ 74.07 \$ 5,679,515		
Net income, for the three months ended	\$ 99,592 \$ 1.64 56,021	\$ 87,513 \$ 1.48 52,302	\$ 44,019 \$ 2.50 17,608	\$ 39,354 \$ 2.22 17,753		

Risk-Based Capital Ratios

As of March 31, 1996, Republic New York Corporation's risk-based core capital ratio was 13.40% (estimated) and total qualifying capital ratio was 22.90% (estimated.) The ratios include the assets, risk-weighted in accordance with the requirements of the Federal Reserve Board specifically applied to Republic New York Corporation on a fully consolidated basis, and capital of Safra Republic Holdings S.A. Total consolidated assets under these requirements exceeded US\$ 60 billion and total consolidated capital, including minority interest and subordinated debt, exceeded US\$ 6 billion.

Republic New York Corporation Fifth Awaze at 40th Street New York, New York 10018

Safra Republic Holdings S.A. 32, boulsvard Royal L-2449 Lutembourg

Lugano, Luxembourg, Milan, Monte Carle, Moscow, Paris, Zurich, Beverly Fillis, Montreal, Nassau, New York, Toronto, Buenos Aires, Montevideo, Punta del Esta, Hong Kong, Jakarta, Manila, Perth, Singapore, Sydney, Taipel, Tokyo

(Incorporated in the Republic of South Africa - Reg. No. 01/00429/06) ("Johnnic" or "the Company")

RESULTS OF ELECTION TO RECEIVE AN INTERIM DIVIDEND INSTEAD OF THE CAPITALISATION AWARD AND AN ELECTION TO SUBSCRIBE FOR NEW SHARES

The right of election to receive an interim dividend instead of an award of capitalisation shares ("the Capitalisation Award") and the right of election by those shareholders electing the dividend shareholders registered at the close of business on Friday, 22 March 1996 ("the record date"), closed at 14.00 on Friday, 26th April 1996. The weighted average traded price of Johnnic shares on The Johannesburg Stock Exchange for the three days ended 25 April 1996 was R55.26. Accordingly, the award of capitalisation shares and the subscription for new shares was determined as a ratio of 0.545829 new shares for each 100 shares held on the record date.

Elections to receive the interim dividend of 18 cents per share in respect of the year ending 30 June 1996 instead of the Capitalisation Award were received in respect of 86 742 679 shares. Accordingly, an interim dividend of 18 cents per share was declared on 7 March 1996 on 86 742 679 ordinary shares in respect of the year ending 30 June 1996. Elections to apply this dividend in subscribing for new shares in Johnnic were received in respect of 60 095 257 of these shares. An amount of R10 817 146.26 was therefore applied in terms of the Subscription. Accordingly, 426 980 new fully paid Johnnic ordinary shares of 10 cents each have been allotted in terms of the Capitalisation Award and the Subscription and the issued share capital of Johnnic has been increased to 151 582 940 ordinary shares.

The listing of 426 980 ordinary shares in Johnnic will commence on The Johannesburg Stock Exchange from the commencement of business today.

Share certificates and cheques in respect of the interim dividend and fractional payments will be posted to members today.

For and on behalf of the board

P F Retief (Chairman)

V G Bray (Chief Executive) lohannesburg

2 May 1996

April 29, 1996

WOOLWICH Building Society

\$200,000,000 Floating rate notes due 1998

Notice is hereby given that .: the notes will bear interest at 6,17031% per annum from 30 April 1996 to 31 July 1996. interest payable on 31 July 1996 will amount to £155.10 per £10,000 name and £1,551.01 per £100,000 note.

Trust Company

JPMorgan

CENTRALE NUCLEARE A NEUTRONS RAPIDES S.A. - NERSA FRF 400.000.000 GUARANTEED FLOATING RATE NOTES DUE 1997 ISIN CODE : FR0000810728 For the period April 30, 1996 to July 31, 1996 the new rate has been fixed at 3,92421% P.A. Next payment deta:

BANK & THUST

July 31, 1996 Coupon m : 28 Amount - FRF 200,57 for the denomination of FRF 20 000 PRE 1 002,85 for Fe denomination of FRF 100 000 THE PRINCIPAL PAYING AGENT

SOCIETE GENERALE

the long term. A conspiracy theory among

shareholders' rights.

If anybody has been wrongfooted by the speculation it is

rescue the project. He was always swift to Alastair's tireless efforts to persuade international institu-

> refined and increasingly rigorous safety requirements imposed. He accused contracing what they had promised.

the British and French governments, the countries' stateowned railways and railway rolling stock suppliers. Mr Joe Dwyer, chief execu-

overcome owed much to Sir

massive cost over-run, seems

start for forex on Internet

By Philip Gawith

A new service offering live foreign exchange prices on the Internet yesterday attracted about 700 inquiries on the first

day of operation.
It is the first time that real time exchange rates have been available on the Internet.

Mr Peter Cruddas, managing director of Currency Mana ment Corporation, which has lannched the service with Information Internet, said: We offer real time prices to anybody, anywhere in the world, 24 hours a day." The service is free, in the

leaked memo from Vickers, the belief that it will generate business for CMC, a marketmaker in foreign exchange and bullion. The software can either be obtained on a disk or downloaded directly from the Internet. Initially, 12 currencies will be shown.

Within a few weeks, it will be possible for clients who have opened margin accounts with CMC to trade on screen. The \$1,200bn a day global foreign exchange market to dominated by wholesale par-ticipants – companies, investors, banks and speculators. High street retail business is only a small part. Mr Cruddes says his service should appeal to the intermediate market There is a huge market worldwide for people who want to trade foreign exchange as a speculative or

investment vehicle He believes small investors can use the Internet to start trading foreign exchange with bonds. In the US shares can be traded by exchanging e-mail messages. In the UK. the Kleetronic Share Information group has plans to set up a

Unbroken growth takes Sage to expected £16m

Shareholders protest about arms sales

Eggs fly as BAe wins

change to voting rules

undertakings to Pirc. the cor-

porate governance consul-

tancy, that it would continue

to put its report and accounts

to the vote "while that

Pirc expressed reservations

about the proposals, but said it

had advised its clients to back

BAe's plan after the company

promised to publish in advance

any substantial shareholder

amendments to its resolutions

in future, and offered to rein-

state an annual vote on direc-

The corporate governance

esterday's AGM by protests at

Calls for BAe to abandon

trade with such countries cul-

minated when about half a dozen demonstrators tried to

issues were overshadowed at

the group's arms sales, particularly to Saudi Arabia and

tors' fees.

remained best practice".

Sage, the Newcastle-based accounting software house, performed to market expectations in the first half of the year, with strong growth in both revenues and profits.

British Aerospace, the aircraft

and defence equipment manu-

facturer, yesterday won

approval for controversial

plans to change its shareholder

voting rules amid chaotic

scenes as peace protestors

disrupted its annual meet-

Although the AGM ended with eggs being thrown at directors, minor scuffles and a

bungled attempt to make a cit-

izen's arrest of the board - the

company claimed it had

achieved its main aim of per-suading shareholders to back

its call for card votes at all

which gives it the authority to

withhold a vote on the compa-

ny's report and accounts – was

supported by more than 90 per cent of the shareholders that

BAe said the proposal

The company's reputation for unbroken growth remained intact with pre-tax profits up 37 per cent to £16.1m (\$24m) for the six months to March 31. Revenues grew 42 per cent to 271.8m (£50.6), while earnings per share grew rose 33 per cent to 9.92p (7.46p). The interim

0.88p a share (0.80p).

The shares fell 24p to 435p, but analysts attached little significance to the movement. Mr pared with £27.1m, but is only two thirds as profitable. Margins were substantially David Goldman, chairman, improved at Ciel and Saari and

COMPANIES AND FINANCE: UK

The company pushed storm the directors' platform through the plan after giving at London's Queen Elizabeth II

conference centre.

As security staff ejected a

number of protestors, another group set off rape alarms and

eggs were thrown at the plat-

Earlier, Mr George Galloway,

the Labour MP, accused Mr

Dick Evans, BAe's chief execu-

tive, of taking part in a con-

spiracy that could have led to

the kidnap or murder of Mr

Mohammed Al-Masaari, the

London-based Saudi dissi-

He claimed that Mr Evans

was implicated in a campaign

against Mr Al-Masaari by a

defence group, which showed

BAe's anxiety over the dissi-

Mr Evans refused to com-

ment directly on the Vickers memo. But he refuted Mr Gal-

a third French software house,

dent's activities.

Sybel, was acquired in Novemsector had remained stable and predictable despite substantial ber. Mr Goldman pointed out change in the PC business.

Sage is the UK's leading developer of business accountthat in France the winter is the strongest trading period and that the French businesses ing software for personal comcould be expected to generate puters. It has subsidiaries in the greater part of their annual France and in the US and is profits in the first half of the The US operations made looking to expand further in both regions through acquisi-21.9m on revenues of £10.9m,

said the accounting software

Sir Alastair's tunnel vision

Andrew Taylor and Geoff Dyer on Eurotunnel's feared chairman

Negotiating with Sir Alastair Morton is like dealing with Tomás de Torquemada, the feared 15th century head of the Spanish Inquisition, according to construction companies and

In an argument, the Eurotunnel co-chairman displays the same fanatical conviction. and being on the receiving end of one of his blunt verbal assaults has been likened to being put on the rack.

The mention of Sir Alastair's name still raises the hackles of contractors who dealt with him during the tunnel's construc-tion. It is no surprise, then, that some of Eurotunnel's bankers are reported to be fed up with his aggressive negotia-ting tactics and would like to see the back of him.

Bankers close to the negotiations say that the grumblings have been limited to a few institutions and that there has been no concerted campaign yet to unseat Sir Alastair.

Prompted by persistent speculation, National Westminster Bank denied on Tuesday that one of its senior bankers was leading an attempt to unseat Eurotunnel's co-chairman.

The issue is not a new one. With Sir Alastair due to stand down in October, several bankers have argued over the last year that they should be negotiating with a chairman who will be with the company in

some bankers even suggests that Eurotunnel has been fan-ning the recent reports of dis-gruntled bankers, so that Sir Alastair appears as defender of

unlikely to have been Sir Alastair, who has proved astute in his handling of the media since he joined Eurotunnel in 1987 to

remind construction companies that their contracts prohibited them from talking to press and television, as he fired off another salvo of public crit-

RESULTS



Alastair Morton: probably got best possible deal for shareholders

icism highlighting their failure to build on time and to budget. Now bankers have become britated by what they regard as provocative public comments made by Str Alastair, who last week blamed them for slow progress in debt renegotiations when announcing a

9925m loss for 1995. Yet even some of his fiercest critics admit that the project would never have been completed without him.

disarray when he arrived. The construction team was embryonic and there were few detailed designs for the project. Institutional investors were threatening to snub vital share issues without which bank loans would have collapsed. That these hurdles were

tions and banks that the tunnel was viable and that he could deliver it. Construction costs subsequently soared as designs were

tors and others of not deliver-At various stages he threat-ened to sue the contractors,

tive of the Wimpey construction group, wryly commented: "Surely we could not all have been in the wrong."

Sir Alastair, in spite of a

been removed long ago. None of the contractors have Shareholders may continue

made much profit from the job. Most say they will do little bet-ter than break even.

to have been considered by shareholders and banks to have got the best deal possible

in the circumstances. Other-

wise he would surely have

to value Sir Alastair's tenacity and fighting ability as he now seeks to renegotiate the terms of some £8.4bn of bank debt. Most analysis believe that some form of debt-for-equity swap is inevitable, which would substantially dilute existing shareholdings.

Those on the receiving end say Sir Alastair's negotiating style incorporates his legendary blunt speaking, a prodiglous memory for minute detail and an over-weening confidence in his own arguments. He is also very articulate and can be charming.

He disconcerts many people "He will fight extremely aggressively until a cause is lost and then will suddenly concede, and all will be warmth and sunshine again. You are left wondering what all the row was about," said one contractor.

The depth of any current discontent with Sir Alastair will be apparent when the company meets the instructing group of banks - the 26 biggest banks in the syndicate - on Friday. Even if Sir Alastair survives

the present whispering campaign, Eurotunnel has to find a successor by the autumn.

According to some banks, now that the tunnel is up and running, the company should adopt a less hostile approach to its business relationships. Sir

Alastair's gung-ho attitude is no longer required, they say. However, others disagree. arguing that Eurotunnel still needs a forceful personality at the belm. "The debt rescheduling is

only one of several key issues facing the group. Once that is sorted, it still has deal with the ferries and the railways."

600♥ 1.53 53.94 3.29♥ 1.52L 2.22L 0.53 2.37 (5,638) (40.1) . (515.7) (516) (1.33) (45.4) (0.21) (2.91) (0.48) 11.8 14.4† 19† 0.87 7.75L 14.25L† 5,856 3 miles to Mar 31 793 7,89 13,9 2,29 23,3 8,26 71,8 (12.9) (16.8) (0.35L .. Yr an Mar 31 1.8 (5.07 (21.4 (5.34 (23.) (6.42 (50.6 (27.1 (12.11L) (3.873) (19.4L) (7.4) . Yr to Dec 31 Hydro Inti 0.75 2.7 0.88 2.85 - Yr to Dec 31 1.3 13 1.25 6 miltre to Feb 29 6.2 9.92 11.64 6 miths to Mar 31 2.4 3.75 3.R5 Total for Total lass investment Trusts Yr to Feb 29 167.8 (135.92) 4.25 (+) (342.1) (117.73) . Yr to stor 21 146 393 0.050 Fiscaling For Eastern ______ Yr to Mar 31 Marray Enterprise ____ 6 miles to Mar 31 ± 1.5 1.6 13 143.4 Earnings shown basic, Dividends shown net. Figures in brackets are for corresponding period. After exceptional charge.

ENTE NAZIONALE PER L'ENERGIA ELETTRICA LIT 500,000,000,000 FLOATING RATE NOTES **DUE 2000** In accordance with the provisions of the Notes, notice is hereby given as follows: 30th April 1996 to 30th October 1996 * Interest period: Interest payment date: 30th October 1996 8.75% per annum LIT 222,396 per Note of LIT 5,000,000 Coupon amounts: LIT 2,223,958 per Note of LIT 50,000,000 AGENT BAN

The United Mexican States Floating Rate

Privatization Notes Due 2001

The applicable rate of interest for the period May 1, 1996, through and including July 31, 1996, to be paid on August 1, 1996, a period of 92 days, is 6.29688%. This rate is 13/16% above the offered rate for three-month deposits in U.S. Dollars which appeared on the display designated as the British Bunkers Association's Interest Settlement Rate (5.48438%) as quoted on the Dow Jones/Telerate Monitor® as Telerate Screen No. 3750 as at 11:00 A.M. (London Time) on April 29, 1996.

The above rate equates to an unserest payment of U.S.D. 16.0920 per USD 1,000.00 in principal amount of Notes.

BANCO NACIONAL DE MEXICO, N.Y.

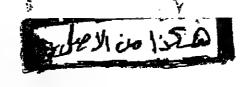
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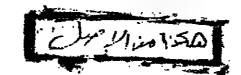
We're good to wood 54% **27**%

Only 12% of the World's production of wood is used in papermaking.

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INVERONMENTAL ACTION GROUP





COMMODITIES AND AGRICULTURE

Mergers lift Sons of Gwalia into gold index Indonesians to join iron ore

By Kenneth Gooding,

S THE STONY MAYOU

Only 14 months ago Sons of Gwalia was - in production terms at least - one of the alsorans among Australian gold miners. Its main claim to fame was that it was the first gold mining company in the world to start seriously hedging its production.

Three quick deals since then have propelled SoG into fifth place among Australian gold producers and a place in the Financial Times Gold Mines index. Its annual gold production has jumped from well under 200,000 troy ounces in 1994-95, to an annual rate of 450,000 ounces and the company will be included in the FT index from tomorrow.

This fast-track entry to the index follows a three-way amalgamation: SoG has merged with Burmine, another Western Australian gold miner, and also gained control of Gasgoyne Gold Mines. The three all have operations in the highly prospective Marvel Loch-Southern Cross region of Western Australia, Mr Jim Cross gold mines, bought from

Australian gold producers



Ainsworth, SoG's chairman, says combining production, reserves and resources from six mines and three processing centres in the region should result in greater operational efficiency and reduced costs. However, nobody at SoG expects the three-way amalgamation to be quite as profitable as the deal in March last year that moved the company into the top ten Australian producers. SoG paid A\$22.8m for

Reynolds Metals, the US aluminium group that was making a strategic withdrawal from Australian gold to concentrate on its core business, The acquisition bought with it A\$7m of tax losses which SoG could use, so the net cost was A\$16m. SoG recovered that in

SoG has transformed prospects for Marvel Loch by paying A\$2.5m for land surrounding the mine and that way removing a severe constraint

walls of the open pit at a convenient angle. Mr Ainsworth says Marvel Loch can now be developed into Australia's second biggest open pit (after the Big Pit at Kalgoorlie), 1.5km long, 300m wide and eventually 350m deep.

He sees output from Marvel Loch alone moving up from 115,000 ounces a year to 170,000 in two years time and suggests that SoG's total gold output will rise to "well over 500,000 ounces" by 1998-99.

Burmine's Copperhead mine is only 70km away from Marvel Loch and Mr Ainsworth says there are several high grade areas suited to open pit mining between them. Yilgarn Star mine, half-owned by Gasgoyne, is 17km from Marvel Loch. Mr ments can be made with Coeur d'Alene Mines, a US company that owns the other half of Yilgarn, to get the maximum benclits from combining mining and exploration efforts in the

SoG was founded in 1984 when a small group of invesand his brother, Chris, now executive director responsible for legal and commercial affairs, decided to redevelop as an open pit the old Sons of Gwalia underground mine near Leonora in Western Australia. Even after being mined for 100 years, the SoG mine still can

SoG started hedging its output from the start. Today it has 1.5m ounces, or 30 per cent of the old SoG company's reserves, hedged. It will collect an average of US\$500 an ounce for all gold it produces until

look forward to at least

another five years with annual

production of about 120,000

June 1998. The company's aggressive exploration efforts - costing A\$13m last year - has also enabled it to build the biggest land holdings in two of the most prospective gold areas in Australia - Leonora-Laverton as well as Marvel Loch Southern Cross and one of the biggest in a third, in the Tanami desert of the Northern Ter-

kind, derivatives traders around the world will donate a portion of today's trading propeeds to the international relief agency, CARE, to fight global poverty. Twenty of the world's futures and options exchanges will lead the effort, pledging a dollar amount to CARE based on the number of transactions made on their trading floors today.

From Toronto to Tokyo, brokerage houses, banks, and individual traders will also make volume-related denations in a

US and Europe have a history of local philanthropy, this is worked together for the benefit

ment - previously, there was not enough room to slope the company's managing director, and coal project in Australia

By Nikki Tait in Sydney

Indonesian investors including Krakatau Steel, the large government-owned steel group - have agreed to join the South Australian Steel and Energy project that is looking at a US\$500m development of iron ore and coal deposits in the state's north, about 100km from Coober Pedy.
If successful, the ambitious SASE joint venture would

South Australia. The SASE plan was formally inaugurated last year when three partners signed a detailed joint venture agreement. These were Meekatharra Minerals, the Australian-listed exploration group; Ausmelt, a listed smelting technology group; and the South Austra-

establish a new industry in

lian government. The deal gave Meekatharra and Ausmelt equal stakes of 40 per cent in the project, with the state government holding the time, the companies involved said that they were talking to other potential investors, both domestic and

This week the partners announced that PT Maritosa Coalindo. a privately-owned resources company, had agreed to subscribe for a 10 per cent equity stake in the project, at a cost of US\$5m, with the option of a further 5 per cent for an initial US\$2.5m, exercisable by October.

Meanwhile, Krakatau Steel has agreed to provide engineers to help establish and run a demonstration plant. PT Puma Sentana Baja, a 100 per cent-owned subsidiary of Krakatau's pension fund has agreed to purchase 1m tonnes of pig iron a year from the proposed commercial project.

Mr Neill Arthur, Meekathar-ra's general manager, said that the joint venture was still talking to other potential partners, both within Australia the remaining 20 per cept. At and internationally.

The aim is to build a demon stration plant over the next four months, to test the technical and commercial viability of Ausmelt's pig-iron making technology. A full feasibility study is then due to be completed by the second quarter of 1997. The joint venture partners have already mooted a stock market float, should the project be given the go-ahead and major fund-raising become

The partners said this week that discussions were under way to site the plant within the shell of an empty power station building at Port Augusta, owned by the state electricity monopoly.

The project is aimed at capitalising on growing Asian demand for steel and steelmaking materials. Although production of pig fron would be the main objective in the project's initial stages, the partners have mooted a wider range of products in the

Amax's Alaskan and Russian projects face steep costs rises

the Marvel Loch and Southern

By Kenneth Gooding

1 to 200

177

7 70 11 23

7: %

Amax Gold of the US is facing steep cost increases at the two projects that it is counting on to put it among the world's big gold producers.

The company says that the cost of developing its Fort Knox gold project in Alaska has jumped by more than 40 per cent compared with its original projections, from US\$256m to \$370m. In addition, the Kubaka project in Russia is now expected to cost 25 per cent more than previously estimated: \$228m instead of 192m

When both projects are under way, the company expects to have annual production of more than 700,000 ounces of gold with an average cash cost "in the low \$200 an

(Proce from Amelgameted Metal Trading) E PLININGUM, 85.7 PUBLITY (5 per larred

ounce range". Last year output from its four present mines totalled 238,000 ounces at

Cyprus's stake in the Kubaka venture. It is now evaluating the impact of the cost increase on the planned acqui-

Finance for the Kubaka project, located about 1,000km north-east of Magadan in far eastern Russia, has been arranged with some development banks, including the US Overseas Private Investment Corporation, and Amax is also exploring various methods of funding the increased

the Kubaka project, with Russian interests owning the rest. Production, at an average annual rate of about 300,000 troy ounces and a cash cost of under \$200 an ounce, is sched-

nied to start next year. causes of the rise in costs at Kubaka include delays to the commencement of the project, logistics and freight costs, higher than expected labour costs and tax and design changes.

The increased cost of the Fort Knox project, expected to produce an annual 350,000 ounces at a cash cost of \$215 an ounce from early next year, arose from a delayed start, "unexpected geotechnical conditions," design changes and higher labour, freight and engi-

Traders show they care

By Laurie Morse in Chicago

In the first initiative of its

multi-tiered effort that is expected to raise at least \$1m. A final tally of donations will be announced on May 10. While futures traders in the

the first time the industry, known for its global reach, has

SOFTS

IN COCOA LCE (E/tonne)

of an international agency. In addition to Europe and the US, exchanges in Canada, Japan, Singapore, South Africa, and Australia are participating.

"CARE is a particularly good fit [with the futures industry]" said Mr John (Jack) Sandner. chairman of the Chicago Mercantile Exchange and Chairman of CARE's World Trading Day. "CARE is a global organisation, and it allows us as futures traders to invest in the future of people whose lives are most at risk."

CARE executive Ms Lynn Allen, who is directing World Trading Day activities, said: "With government funding for world relief dwindling, private philanthropy becomes even more critical. This event, which links the success of each exchange's volume to the success of people in need, goes beyond local corporate giving".

Australian meat reform planned

By Nikki Tait

Australia's federal government is to set up a taskforce to overhaul Australia's large but ail-

ing meat industry.
Announcing the inquiry yes terday, Mr John Anderson, the new primary industries minister, said that there was urgent

need to reform in the industry

and that the three statutory bodies that played a role in the sector - the Meat Industry Council, the Meat Research Corporation and the Australian Meat and Livestock Corporation - should be streamlined.

"There's a whole range of industry matters that need to be addressed that run the whole gamut of activity, from farm through to freight," he said. The taskforce is expected to report within a few months. Australian producers have struggling in the face of the glut of US beef, which has driven down prices, and the increasingly aggressive export focus by US farmers. Higher feedgrain prices have com-

Pulp market slide reversed

By Robert Gibbers in Montreal

Many leading international forest products groups have posted a US\$60 a tonne increase in northern softwood pulp transaction prices to about \$580, effective from June 1, reversing the fall from a peak \$1,000 last October to the current \$520.

Stone-Consolidated, Georgia

88.225 +2.000 88.225 88.225 87.350 +2.000 87.350 87.350 84.725 +2.000 84.725 84.200

18 81 176

114 66 33

Jul Sep 216 240 192 217 168 195

\$18.99-9.01 \$18.74-8.76

\$232-234 \$156-158 \$104-106 \$192-194 \$188-190

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LONDON SPOT MARKETS

III CRUDE OIL FOR (per barrel)

■ Oil PRODUCTS NWE prompt deliv

M. ALAMADAD MA

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2500.....

M COFFEE LCE

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Premium Gasoline Gas Oil Heovy Fuel Oil Naphthe Jet feel

NATURAL GAS (Pence

1800...

Pacific and Stora are leading to \$740 on average on April 22 the move, say market analysts. A sudden increase in demand for top quality northern pulp has also extended to US southern pine pulp, for which \$540 is being asked for June delivery, up from \$480, they

White papers, including some key business papers,

under the leadership of International Paper and other companies have followed. Linerboard prices are also

coming off the floor, with many north American producers posting a level of \$380 a short ton, up from \$330. But newsprint remains weak because of high North Ameri-

COMMODITIES PRICES BASE METALS LONDON METAL EXCHANGE

	Cash	3 0000
Close	1601-02	1633-34
Previous	1898-99	1630-31
High/low	1559/1547	1088/1925
AM Official	15 95.5-9 6	1628-26.5
Kerb clase		1636-35.5
Open int.	206,973	
Total delty furnover	54,532	
M ALUMINDUM ALL	OY (5 per tonn	e)
Close	1340-50	13/63-65
Previous	1335-45	1275-80
High/low		130/1302
AM Official	1335-40	1375-00
Kerb close		1977-7
Open Int.	5,412	
Total dolly turnover	2,216	
III LEAD (\$ per tonne	<u> </u>	
Close	608-10	799-800
Previous	800-2	793-4
High/low	807/805.5	602/790
ANI Official	805-5,5	794-6
Kerb close		80 1-2
Open int	35,568	
Total daily turnover	5,81?	
NICKEL & per ton	ne)	
Close	7945-55	9045-50
Previous	7890-900	7990-95
Alle a Maria		87/20/2045

High/low AM Official Kerb close Open int. Total daily to 7845-50 E TIN (\$ per torete Close Previous High/low AM Official 6480-85 680/6450 8510-20 6500-10 18,668 4,496

Open int. Total daily lumover E ZINC, special high grade (5 per 1028.5-27.5 1029.5-31.5 72,460 23,819 E COPPER, grade A S per tonna 2698-703 2668.73 2677 2676-78 High/low AM Official 173,802 80.117

LME Closing S/S rate: 1.4951 Spot: 1.4951 3 milles: 1.4932 6 milles: 1 4920 9 milles: 1.4905 HIGH GRADE COPPER (COMEX)

PRECIOUS METALS THE LONDON BULLION MARKET (Prices supplied by N M Rothschild) 391.00-391.50 391,00 261,14 488,12 392,30 261,57 489,59 Opening

393,90-394,40 391.00-391.50 on 391.40-397 80 Loco Ldm Maan Gold Lending Rates (Vs USS) 3 months4.10 p/troy 62. 355.85 360.55 Silver Fb: Spot 532.50 538.95 545.50 558.35

\$ price 390-393

402,45-404.95 91-94

£ equiv.

6 months

Gold Coins

a cash cost of \$326 an ounce. Amax is 51 per cent-owned by Cyprus Amax Minerals and is in the process of acquiring

Cyprus owns 50 per cent of

Precious Metals continued GOLD COMEX (100 Tray az.; S/tray az.) WHEAT LCE IS pay formed +1.4 366.8 395.8 918 20,773 +1.5 400.0 300.1 40 8,256 +1.5 403.2 400.8 3,559 27,280 +1.5 - 530 5,186 118.56 +0.80 - -118.00 +0.65 118.20 117.50 118.75 +0.85 119.80 -127.75 +0.85 - -THE PLATINUM NYMEX (50 Troy oz.; \$/troy oz.)

408.0 +2.4 407.8 403.0 1,957 19,921 408.9 +2.4 410.8 408.5 75 3,279 411.7 +2.4 - - 1 910 414.4 +2.4 - - 2 1,318 IN PALLADAM NYMEX (100 Tray ez.; 5/tray (32.) 123.25 +1.90 134.25 132.00 1,803 5,410 134.46 +1.85 - - 305 2,771 135.50 +1.70 136.00 134.50 45 197 1,863 8,287 ■ SELVER COMEX (5,000 Troy cz.; Cents/troy cz.) \$37.5 +8.5 540.0 \$30.0 2,822 3,986 \$40.1 +8.5 542.6 542.5 14 8 \$42.5 +8.6 648.0 \$34.0 20,024 44,856 \$47.5 +8.5 540.0 \$34.0 20,024 44,856 \$47.5 +8.5 540.0 \$47.0 122 8,452 \$62.4 +8.6 584.0 564.0 56 3,444

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GRAINS AND OIL SEEDS

578.00 +30.00 579.00 549.00 243 1,383 55 118 M MAZZE CBT (5.000 bu min; cents/56to bushel) 488.50 +25.50 489.00 464.00 14.065 17.978 486.25 +14.25 467.50 446.00 55,636 165,824 374.25 +19.75 374.90 357.00 15.303 59.256 336.75 +8.25 337.00 326.26 31.591 134.696 343.00 +8.50 342.50 333.00 1,461 14.696 345.00 +10.00 346.00 338.00 216 14.696 118,764 402,271 215

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2.200 +0.009 2.210 2.180 1.268 16.376 2.185 +0.012 2.190 2.165 1.214 14,626

131.50 +2.85 131.75 130.50 96 566 133.50 +2.75 134.00 132.50 126 1,561 - 399 203 2,911 40 984 - 140

678.00 +34.50 678.00 682.00 1,406 1,884 597.00 +30.00 567.00 361.00 12,834 80,685 588.00 +30.00 688.00 641.00 3,084 14,882 593.00 +30.00 593.00 580.00 5,430 17,486

248.2 +8.4 249.5 243.5 9.051 7.088 252.1 +87 253.3 245.7 24,523 52.365 252.1 +6.5 253.3 245.2 3889 11,920 248.0 +5.5 248.8 245.2 880 7.384 243.8 +5.0 244.2 240.0 370 3,238 243.6 +4.8 244.5 240.2 4,327 15,767

POTATOES LCE (Extorne) 1100 - - -121*8* +1.5 124.0 122.0 # FRESHT (BIFFEQ LCE (\$10/index point) +8 1370 1365 30 +10 1290 1286 14 +5 1260 1289 17 1 +7 1345 1340 21 1 +20 - - -1376 1263 7255 1337

All futures data supplied by CMS.

Nuts and Seeds Prices from Kenkko Group; US\$ a tonne, Ira-niam pretachos 28/30 raw (in shell) naturally opened (round); 1995 crop 3,350 CFR/FOT MEP, 26/28 3,450 CFR/FOT MEP, US simonds MEP, 26/28 3,450 CFR/FOT MEP, US almonds (phelled) 23/25 NPSSR 1995 crop availability very short; rumours of new crop damage bring current level to 5,950; price dea for NPS 20/22 ic 6,300 FAS California, down on lack of demand. US walnuts Jumbo Hartley in shell, 1995 crop 2,350 FCA Antwerp Indian cashevis. rew. 1995 crop, W-320, 6,250 spot Europe, tight (new crop offers at 5,950). Turtish nozei-nut kernels, 13/15 standard 1s, 1995 crop, 3/50 FCB MEP. Anni-lume the 1sp 1995 crop, 13/50 FCB MEP. Anni-lume the property higher 3,250 FOB MBP, April-June shipment; higher prices lifely because of Turkish shappers selling short and having to fulfill earlier contracts. Chinese pine nut kernels; Chinese defaulting on contracts following price increase from 4,500 to 6,500; no Chinese supplies available.

E COOOA CSCE (10 tonnes; \$/tonnes +20 1395 1365 23 258 +20 1390 1395 9,884 33,317 +23 1400 1395 9,884 33,317 +24 1407 1391 776 17,925 +16 1412 1391 435 13,994 +15 1407 1407 10 4,932 IN COCOA (ICCO) (IEVTA/MY # COFFEE LCE (\$/tonne) #8 1840 1911 1,204 3,591 +8 1845 1915 1,866 18,152 +10 1935 1820 385 5,724 +10 1939 1912 482 3,021 +22 1915 1900 410 1,462 -4 1976 1880 243 684 1911 1921 1920 1920 1920 1866 1868 May Jul Bep Her Jun Her Total 1911 1,254 3,367 1915 1,866 18,152 1829 385 5,734 1912 462 3,021 1900 410 1,482 1880 243 684 4,848 30,884 THE CONTROL OF CRICE ST. LOCKING CONTE/TOX W CONTES (ICO) (LEs cerres/pound) 107.94 356.7 -1.5 358.0 356.6 377 12.085 330.9 -0.9 333.0 371.2 186 5,230 322.1 -1.2 324.0 333.3 35 3,765 371.6 -1.9 371.3 387, 57 2,806 320.0 -1.1 321.5 378.7 57 2,806 320.0 -0.8 324.0 321.5 59 359 ■ SUGAR '41' CSCE (112,000bs; cents/bs) 10.33 -0.06 10.46 10.31 10.00 30.00 10.40 - 10.45 10.38 5,371 35,084 10.45 - 10.37 10.38 3,690 24,734 10.35 - 10.37 10.34 326 6,044 10.27 - 10.27 10.26 316 3,298 10.15 - 10.19 10.15 22 1,885 E COTTON NYCE (50,000lbs; cents/fbs) 84.95 +1.95 84.95 83.45 87 240 86.35 +1.23 86.50 85.15 4.475 24.324 85.10 +1.15 85.10 84.00 421 3.401 83.58 +0.81 83.90 22.80 2.986 254.50 84.27 +0.77 84.55 83.70 210 2.983 84.90 +0.70 84.90 84.20 114 1.343 ORANGE JUICE NYCE (15,000m); CHIMING 130.05 -4.45 131.50 130.00 1,175 1,910 133.05 -1.20 133.75 130.05 1,374 14,652 131.95 -0.45 132.30 130.50 223 3,428 125.50 -0.25 125.75 124.50 - 994 +0.25 123.75 121.75 10 3.137 +0.20 - 1 256 2,723 24,515

ATAC SMILLION Open Interest and Volume dista shown for contracts traded on COMEX, NYMEX, CBT, NYCE, CWE and CSCE are one day in america. Volume & Open Interest totals are for all traded INDICES EL RELITERS (Base: 18/9/31=100)

E GSCI Spet (Base: 1970=100)

Apr 29 214.75

Bacton (June) Petroleum Argus. III OTHER Gold (per troy oz) Platinum (per troy oz.) Palladium (per troy oz.) \$402.00 \$131.50 Copper Lead (US prod.) 127.0c 45.00c 18.20r Cattle (live weight) Sheep (live weight) Pigs (live weight)) 102.58p 185.46p 108.99p Lon. day sugar (row) Lon. day sugar (wte) Sartey (Eng. tead) Maiza (US No3 Yellow \$264.00 \$377.-0 114.40 Unq Ursq Wheat (US Dark North) Rubber (Jun)♥ Rubber (Jul)♥ 99.50p 363.50m Rubber (KL RSS No1) Coconut Oil (Phil)§
Palm Oil (Maley.)§
Copra (Phil)§
Soysbeans (US) \$830.0v Apr 30 month ago 2106.9 2106.3 \$502.Dv ■ CRB Futures (Base: 1967=100) 430p

went up from \$700 a short ton can publisher stocks. **JOTTER PAD** MEAT AND LIVESTOCK W LIVE CATTLE CME (40,000/be; cents/be) 58.250 +0.900 58.350 58.750 17,002 34,208 80.525 +0.775 60.800 58.200 5,457 24,201 82.675 +0.825 82.800 (1).700 3.243 17,898 81,925 +0.725 81.600 60.500 2,178 10,425 81,980 +0.600 82,000 81,250 MID 8,300 61,980 +0.405 14,400 63,673 120 1,561 III LIVE HOOS CIME (40,000th): comit/ba) 00.380 +0.600 00.600 58.200 5.021 17,035 58.078 +0.200 58.500 57.200 2,749 8,150 58.623 +0.300 58.660 57.200 382 6,363 48.425 +0.150 48.500 57.800 382 6,151 57.350 +0.576 58.200 51.850 274 3,841 72.680 +1.078 73.000 71.600 114 774 The solution is HP Computer Systems. PACKARD CROSSWORD No.9,058 Set by MUTT LONDON TRADED OPTIONS Strike price 8 tonne — Calls — — Puts —

ACROSS 1 Addled Rev in nearly new car returning relative to Gates-head – it's traumatic (5-7) 10 With companion in second Tennessee (7)

12 Snake in French tree (5) 13 Tear-jerkers put us off foolishly introducing daylight-

knowing (8) 24 Drank back at military headquarters . . . (5) the colonnade (7) 27 This is the kind of poetry our

(6,6) 2 A warning was once enough Neighbourhood has a lot of depravity in it that's unknown (8) 4 Animal turns up, a weak

thing (4)

28 Private beds in secluded area

5 Escort almost died about instrument being twisted (10) 6 During manic tussle stroke 7 A small thing for relative for

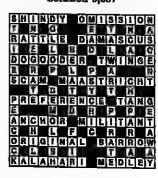
11 Money back, river having 8 What the N. American Indian eroded the fertiliser (7) once had a go at making? once had a go at making? (1,5,7) 9 Can't remember, me, being saving (3-5)
14 By birth weight, a gem (10)
15 For toothless old Sue, tune
should be sprightly (10)
17 A capital fellow like Alfred
Doolittle (8)

16 A woman's love for a great 19 How sweet! BR arranged to man (4)

18 An objection about the instru
21 Fill as of old; member allowed 20 As depicted in "The Return of the Native"? (10)
22 In a different manner, besides (5)

25 Crow takes the game (4)

Solution 9,057 Edna makes up (7)



Italian futures jump on rating news

By Samer Iskandar in London and Lisa Bransten in New York

Most European markets were closed yesterday for the May Day holiday. Italian BTP futures however showed a very strong performance on hopes that the country's sovereign ratings might be raised.

US Treasuries also rose after the release of a National Association of Purchasing Manage ment index showing that inflationary pressures in April were weaker than market participants had feared.

Italian BTP futures traded in London rose by almost a full percentage point in the after-noon while the underlying cash market was closed. Liffe's June BTP future had fluctuated in a narrow range of 113.8 to 114 for most of the session. but jumped to 114.80 soon after Moody's Investors Service said it was reviewing Italy's Al sovereign rating, and settled at 114.64, up 0.33.

The rating agency said it might might raise Italy's rating after "an examination of ... the changes made in the country's Moody's said it would place particular emphasis on "the medium-term trajectory of government finance".

In the longer term, Mr Kirit Shah, chief market strategist at Sanwa International, believes a pause in the recent convergence of European highyielding markets towards German yield levels is likely.

GOVERNMENT BONDS

"The Italian market, for example, is now pricing future interest rate cuts that still have to be seen", he said.

■ The German market was closed, but in London Liffe's June future on 10-year bunds settled at 96.92, down 0.41. The contract showed weakness in early trading, reaching an intra-day low of 96.72, but recovered in the afternoon in line with US Treasuries. Ms Sharda Persaud, German

economist at San Paolo Bank

ern Europe - exceed a level stipulated in the contract.

against the industry loss indi-

ces of Property Claims Services

well as the interest generated

by it, is at risk in the event of

product which accesses a new

source of capital for the rein-

surance market," said Mr Mat-

All of the bond's principal, as

"This is a ground-breaking

Losses will be measured

underlying fiscal structure". market participants do not expect further rate cuts this year, bunds still have upside potential". She believes the Bundesbank will start reducing the repo rate again, possibly early in June.

> ■ UK gilts traded sideways in moderate volumes. Political uncertainty weighed on the market, as traders were reluctant to take positions before today's local elections. Liffe's June long gilt future closed at 106d, unchanged.

■ US Treasury prices gained in early trading as the figure for manufacturing activity from the National Association of Purchasing Management came in ahead of expectations, but below Tuesday's figure from purchasing managers in the

Chicago area. Near midday, the benchmark 30-year Treasury was % higher at 88% to yield 6.871 per cent, while the two-year note was up at 99¼, yielding 6.027 per cent. The June Treasury bond future added fa to 109 ...
The yield curve that maps

the yield spread between twoyear notes and 30-year bonds flattened by 2 basis points to 84 points on the suggestion that national manufacturing activity was not as strong as the Chicago figures suggested. A flattening yield curve is generally interpreted as a sign that fears about inflation are eas-

The NAPM put manufacturing activity at 50.1, the highest it has been since the spring of last year, but below the 52 level the Chicago association reported on Tuesday. Economists had forecast a NAPM fig-

Yesterday's figure was just above the threshold of 50 that is considered a sign of economic expansion.

There was little market reaction to news that the Conference Board's index of leading economic indicators rose 0.2 per cent, slightly below the 0.3 per cent many economists had expected. Trading was comparatively light as investors awaited tomorrow's key figures on employment levels in

Offering by the Halifax sells out in hours

By Conner Middelmann

The UK's Halifax Building Society had the eurobond stage to itself yesterday, with Japan and most of Europe closed for national holidays.

Undistracted by other offerings, UK fund managers especially long-term investors such as life insurers and pen-

INTERNATIONAL BONDS

sion funds – snapped up the £300m 25-year subordinated bond offering, which sold out only hours after launch, lead manager SBC Warburg said. "Halifax is a very strong name in the sterling market they're a very rare issuer, and the pricing was fair," said a syndicate official at another

The bonds were priced at a spread of 100 basis points over gilts, which narrowed slightly after they were freed to trade. The pricing was tighter than comparable secondary subordinated bank bonds, but dealers said that was justified by the borrower's rarity value and strong credit standing.

It was the Halifax's first dated subordinated bond issue ranking as Lower Tier 2 capital since February 1992. While new deals are likely to

be thin on the ground this week, the market is preparing for more in coming weeks. The Korean Development Bank is to hold European roadshows next week for a global bond, said to be around \$750m of five-year or 10-year bonds via CS First Boston and Lehman Brothers.

Israeli officials will travel to London next week to select underwriters for the country's first eurobond, expected this summer. Israel is looking to raise \$200m to \$250m.

FT-ACTUARIES FIXED INTEREST INDICES

Denmark 61 98

draws a mixed response an outstanding success," said Ms Ingrid Iverson, emerging

By Lisa Bransten in New York and Conner Middelmann in London

Mexico's offer to exchange up to \$2.5bn in outstanding Brady debt for a 30-year global bond drew a mixed response from global investors yesterday.

Mexico agreed to exchange \$1.75bn in outstanding Brady debt for a 30-year dollar denominated global bond with a yield of 552 basis points over the US long bond. That is less than the \$2.5bn maximum Mexico offered to exchange, and the yield was at the high

end of expected pricing.

The global bonds receive interest of about 164 basis points more than Mexico's par Bradys at the close on Tuesday, but lose the 30-year zerocoupon US Treasury bonds that collateralised the Bradys in case of default, so the offer was viewed as a key test of demand for pure Mexican risk. "It's not a failure, but it's not

markets debt strategist at UBS Securities in New York. "It doesn't suggest that there is a huge pool of investors out there desperate to buy pure Latin 80-year risk."

Mexican global bond swap,

Some, however, took as a favourable sign the fact that Mexico managed to sell even a more modest amount of long-term debt just 15 months after the botched devaluation of the peso sent it into financial crisis. "The fact that they managed

to get \$1.75bn of pure Mexican

30-year debt into the market is a very positive statement in - there's no way that would have been possible six months ago," one syndicate official said. He reported some buying by emerging market fund managers and UK banks. Mr Ali Naqvi, head of emerging market debt at Citibank Global Asset Management, said

that a relatively large proportion of Bradys were exchanged by holders other than the Mex-. ican government.

While the smaller than expected size and the high yield may cause the issues to weaken in the short-term, he said, in the long run it should be good for Mexico because it: extends the duration of its debt, establishes a 30-year benchmark and frees up some of the collateral for other

The new bonds immediately traded down to 92.25 from their offer price of 92.93, and then settled at about 92.60, but some attributed the decline to hedge funds that bought into the deal to "flip" them quickly in the

secondary market. Mr Martin Werner, director general of public credit in the Mexican finance ministry, said he was pleased with the auction, but that Mexico would not follow this deal with another exchange this year.

Catastrophe insurance loss bonds pioneered

By Hichard Lapper

Benfield Ellinger. London-based reinsurance broker, has linked up with AIG Combined Risks (AIGCR), the investment banking arm of American International Group, to place a portfolio of catastrophe insurance-linked bonds

with a UK fund manager. The fund manager is investing an amount understood to be around \$10m with an offshore special purpose vehicle. This vehicle will in turn sell a loss warranty reinsurance contract to a reinsurance com-

The policy is triggered if catastrophic insurance losses in any one of five geographic areas - the US. Japan. Austral-

Saint Gobain doubles credit facility to \$1bn

0.68 0.43

Sett price Change

114.27 114.02 -0.30 114.81 113.80 113.35 -0.50 118.84

CALLE

Jun 1

Sec

Saint Gobain, the French glass and construction materials group, has signed a \$1bn sevenyear syndicated credit facility, double the amount it was originally seeking.

Demand from banks wanting to be in the deal was such that \$1.4bn was raised in general syndication, almost three times the initial target, but the company decided to limit the size of the facility to \$1bn.
Including the three arrang-

thew Harding, chairman of ers – ABN-Amro, Chemical Mr Diego Wauters, president and chief executive of AIGCR, and Deutsche Bank - 28 other banks participated in the loan. which will be used for general described the deal as a "pioneering transaction for the financing needs and will partly replace the company's existing bilateral lines. insurance and reinsurance

The interest rate on the loan in years one to five is 12.5 basis points over Libor, rising to 15 basis points in the final two

Merck, the German pharmaceuticals company, is seeking to raise DM1bn in the syndicated loans market, via Deutsche Sank and Dresdner Rank. The seven-year facility will be launched into general syndication in the next few weeks. NatWest Markets and Banco

Santander have arranged a Ptal7.1bn credit facility with a final maturity of 2010 to fund the construction and sale of 10 vessels to be built by the Spanish shipyard Astilleros de Huelva. The buyers of the vessals are Miltose and Maribay, two Irish companies.

1.26 1.57 1.02

Est. vol. Coan int.

Sep

PUTS

113.66 113.60

Jun

Egyptian offshore fund planned *

he was encouraged by the fact

By Roule Khalet

Although the Egyptian stock exchange is the second largest Middle Eastern market open to foreign investors it has so far attracted little interest from institutional buyers.

HSBC James Capel is looking to change this with the launch of the first offshore closed-end fund to invest in Egyptian

equities HSBC is attempting to raise between \$50m and \$100m from institutional investors in Europe, the US and the Middle East. The Egypt Investment Company will be listed on the London Stock Exchange and will be managed by Concord National, a joint venture between Concord Group, a USbased investment manager.

and the National Bank of

Egypt. A total of \$20m is said to have already been committed by local investors.

The Egypt investment strategy is driven by the government's stated determination to speed up a privatisation programme that has been mired in bureaucracy for years.

Pressed by the International Monetary Fund, the newly appointed government issued in February a list of 80 companies worth over \$4bn to be privatised this year.

Concord officials admit this target may be too ambitious and perhaps no more than 40 per cent of the companies will be sold, but insist that progress on the privatisation front is likely to be made at last.

Stocks on the Egyptian exchange trade at a cheap seven times earnings on average. But out of the 700 companies listed on the exchange, only 100 actually trade while 30 stocks represent over 50 per cent of the total \$8bn in market capitalisation.

The market was down 19 per cent in 1995 and has lost over 5 per cent this year. But Concord officials say the market is unlikely to drop further.

They also play down con-cerns about Egypt's political risk - highlighted last month when Islamic militants gunned down 17 tourists outside a Cairo hotal.

The investment managers say that compared with the general volatility of the Middle East, Egypt is politically sta-ble, with the National Democratic Party having consolidated its rule in the December 1996 parliamentary elections.

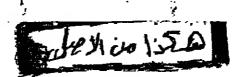
WORLD BOND PRICES BENCHWARK GOVERNMENT BONDS III (ILLIND PUTURES CHTICHE (LIFFE) DIAZZO,000 coints of 100% Day's change 800 MOO 107,8690 -0,630 8,78 0,0000 - 0,00 0,0000 - 0,00 104,8400 -0,300 7,28 0,0000 - 0,00 0,0000 - 0,00 0,0000 - 0,00 118,5760 +0,040 2,51 67,2270 -0,170 3,31 0,0000 - 0,00 0,0000 - 0,00 0,0000 - 0,00 0,0000 - 0,00 109,-11 - 7,38 98-07 +1,32 80,200 -0,00 109,-11 - 7,38 98-07 +1,32 80,000 109,-11 - 7,38 98-07 +1,32 80,000 109,-11 - 7,38 98-07 +1,32 80,000 109,-11 - 7,38 98-07 +1,32 80,000 109,-11 - 7,38 98-07 +1,32 80,000 109,-11 - 7,38 98-07 +1,32 80,000 109,-11 - 7,38 98-07 +1,32 80,000 109,-11 - 7,38 98-07 +1,32 80,000 109,-11 - 7,38 98-07 +1,32 80,000 109,-11 - 7,38 98-07 - 1,38 10,000 8,725 7,000 6,750 8,000 5,750 7,250 6,000 02/06 02/06 05/06 05/06 03/05 03/05 02/06 02/06 02/06 09/06 01/06 02/05 01/06 02/05 01/06 107,0000 -0.630 0.70 6.78 0.00 6.37 MOTIONAL ITALIAN GOVT. BOWD (BTP) PUTURES (LIFFE)* Lim 200m 100ths of 100% III ITALIAN GOVT, BOND (BTP) FUTURES OPTIONS (LIFFE) Lin200m 100ths of 100% 8.01 8.11 6.59 6.79 6.76 M NOTIONAL SPANISH BOND FUTURES (METT)(Apr 30) Treasury Bilte and Bond Yields Two year . Three year . The year . 10-year . 30-year 8.11 4.99 5.14 8.32 5.64 Jun 108-00 108-03 - 108-07 105-24 Sep - 105-03 -0-01 III LONG GALT PUTURES OPTIONS (LETT) 250,000 84ths of 100%

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Dec	120.88	120.90	+0.04	121.00	120.56	501	5,821
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PENSION FUND INVESTMENT

Pay now or suffer later

Funded plans could meet the world's growing pension costs, writes Barry Riley

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n many countries around the world demographers are looking at projected population statistics over the next 20 to 50 years with sentiments varying from concern to alarm. Pay-as-you-go social security systems are buckling under the strain: for example, in the French civil service the number of active employees per pensioner is projected to fall from 2.5 to 1.4 by 2015.

ls the choice therefore between a ruinous reduction in benefits and a catastrophic increase in taxation? Not necessarily: an increased role for funded pension systems could help to close some of the gap. But it will depend on whether new pools of long-term capital, wisely invested, can serve to edge up economic growth rates and create more wealth to pay for future pensions.

The conditions could be coming into place, therefore, for substantial international growth in pension funds. But a number of very different models are on offer, with a variety of implications.

Ironically the best-estab-lished model of funded pension plan, the defined benefit occupational scheme, which has become widespread in the US and the UK, is actually in decline. Shrinking company workforces and cost-cutting employers have undermined their dominance.

There are some interesting perspectives on this in a round table discussion transcript produced by the UK performance measurement consultants World Markets. In Britain, WM's panellists point out, tensions are rising between the bigh investment return (that is, cost minimisation) objectives of sponsoring companies

ties of pension fund trustees under the Pensions Act 1995. Those tensions could become irreconcileable.

Other models could nevertheless generate the enormous volumes of capital required to finance future pensions. But there are three big obstacles: Nationalism. Governments are often anxious to prevent pension funds from investing

Regulations. Pension funds are sometimes forced to provide cheap finance for governments, under the guise of prudential controls: Paternalism. Schemes run by employers often skew bene-

fits and penalise groups such as mobile workers. What are the models on interest has been generated by the progress of the Chilean formula for the modernisation of

Established in 1981 as a successor to a near-bankrupt pay-as-you-go arrangement, this system is now at a reasonably It involves employees paying compulsory contributions of 10 per cent of earnings into 21 private sector investment institutions, or administradores de fondos de pensiones (AFPs).

Negative returns by these funds in 1995, gave the system a jolt, but in general the high savings ratio has supported a healthy economic growth rate. Funds may be transferred between different AFPs. But all operate under tight restrictions, including a requirement to invest at least 50 per cent of their assets in public sector

Another unconventional model which has attracted interest is Singapore's Central Provident Fund, which was set up while the island was under

British rule back to 1966. But with contributions at a massive 40 per cent of income. and investment limited to government debt and infrastruc-



ture projects, Singapore's allembracing system has little appeal outside highly central-

isted sumes.

In the US there has been rapid progress by defined contribution schemes, company plans without any guaranteed level of pension, the latter depending entirely on the capital accumulated by each member. These schemes are likely to prove cheaper for employers than most other alternatives, and certainly involve less risk for them in the long term.

It is generally thought that many British companies will soon switch to defined contribution schemes, at least for new employees: Barclays Bank last month announced its intention to do so, for instance.

Defined contribution plans must follow a more cautious investment strategy than defined benefit counterparts. This is because individual

members with finite - and possibly short - periods until retirement are less able to bear investment risk than future Any shift towards personal perficiences of a schered fund with an indefinite life span.

separately for lower risk investments. variant of this structure A is the employer-spon-sored personal pension

example of which is the 401(k) plan which is growing so rapidly in the US. Here the individual often takes the investment decisions as well as the The accelerating flood of 401(k) money into equity mutual funds has boosted Wall

Street in recent months but

has also created anxiety about

More sophisticated structures.

now allow members of defined

contribution plans within a

few years of retirement to opt

future instability should members switch their funds into bonds or money funds, perhaps in conditions of panic.

pension plans, either employersponsored or free-standing, would expand the role of retail investment instinutions at the expense of the specialist institutional pension fund managers which have become so important in the US and the

The institutions that would prosper in this environment would have to be well known to the public and have the systems to deliver a personal service, possibly including advice on investment switching as well as valuations and

reporting. In the US, for instance, this could be expected to lead to a reversal of the consultantdriven proliferation of investment boutiques which has

been such a feature of the past run-up to the next general electwenty years. There could be a new burst of expansion for the big mutual fund and retail stockbroking groups. But such a structure would be inher-

In Australia, life assurance companies stand to benefit greatly from the introduction of mandatory contributions into approved pension plans, rising in stages to 12 per cent of pay (taking employer and employee contributions

ently much more expensive.

The element of compulsion reflects official alarm at the future increase in the population of pensioners, and the potential build-up of the government's liabilities if individnal cithens do not themselves save for their old age.

In the UK this question is also being actively debated, although it is something of a political hot potato in the

plenty of headroom Quant techniques: the UK is the toughest market

IN THIS SURVEY

 Pensions Act: trustees called to account . Global custody: get bigger or get out of the business

@ DC echemes: they are the aponsors' darlings Corporate gow investors wriggle on the hook

Consultants: a few big

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● US; DB's loss is DC's caln Japan: carrying granny ● Europe: an incomplete

Editorial production: Graphics: Robert Hutchison Steven Bernard

point was made that defined benefit pension schemes have generated very high returns because of their large exposure to equities. Defined contribution plans, even when they have very low costs, are likely to be less efficient at delivering

future pensions. The worry, perhaps, is that far too much of the world's burgeoning pension fund contributions will be channelled into government bonds. In many countries this will be a statutory requirement.

To the extent that these bonds simply finance current fiscal deficits they represent an extra tax burden on future citizens rather than real assets that could help to pay all those pensions in the 21st century. How much better it would be to put some privatised industries into their pensions pots. They should do more of it in

To avoid unpleasant surprises when selecting investment managers, you must be fully informed.

tion, given that there is not

much conceptual difference

between a compulsory pension

Last year the Retirement

Income Inquiry, a committee of

experts backed by the National

Association of Pension Funds,

proposed a National Pension

Scheme (NPS). This would pro-

vide for the 50 per cent of

workers left outside the scope

of existing occupational pen-

Chilean-style designated fund

management companies which

would be required to operate at

rock-bottom cost levels. They

would compete for membership

on the basis of investment per-

formance much as institutional pension fund managers do

now, but the relationships

would be with individuals

At the WM Round Toole the

rather than with trustees.

The NPS would establish

sion plans.

contribution and a tax.

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Passive managers: by Philip Coggan

More funds will succumb

Index funds can win more pension fund clients before natural limits restrict growth

It is a testimonial to the marketing skills of active managers that they have been able to hold their own in the face of competition from

The evidence would suggest that pension fund trustees should be using index managers more than they do. In UK equities, active managers have underperformed the FT-SE All-Share Index in eight of the last 10 years, although in three of those years (including 1995) the underperformance was only 0.1 per cent.

In world markets, figures from performance measure-ment company WM show that managers lagged the index in six of the last 10 years, notably in 1995 when they were heavily underweight in the fast-growing US market.

However the heavy weighttake in the Pacific region means that over the last five years as a whole they have actually outperformed the world index, thanks particularly to a good performance in 1993, when they beat the index by 11.3 per cent.

The record of active managers in recent years has improved, perhaps because there has been a tendency for funds to concentrate in the hands of the best of them. There may also be a sense in which trustees think they would be "giving up" on try-ing to get the best returns for their fund if they opted for

The proportion of the UK asion fund market run by index fund managers is around 15-20 per cent, comnared with around 30 per cent in the US.

There is undoubtedly a natural limit on the proportion of intellectual argument in favour of indexation is based on efficient market theory; the

modity reflects all available news and that only future events, which by definition are mknown, can move prices.

To make the market efficient, there need to be plenty of active managers trawling the market for bargains. Once indexation predominates, markets would, by definition become inefficient, giving active managers scope to out-

Many investors reject the intellectual case for efficient markets, and it certainly has been possible to find anomasuch as the outperformance of small companies or high-yielding stocks - which cast doubt on the theory. It is also difficult to deny, in the face of records such as Mr Warren Buffett's, that a few individuals have been consistently able to demonstrate an shility to beat the markets.

While it may be possible for the market it is not so easy for trustees to identify them in advance. "The justification for index-tracking is that, while skill does exist in the City, it cannot be reliably pre-identified," says Mr John Shuttleworth, actuarial partner at Coopers & Lybrand.

Index-tracking also has the advantage that its costs are always likely to be lower than those of active management. highly-paid staff and cover their expenses as they travel

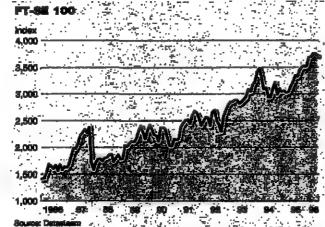


the country, or the world, interviewing companies. Second, an active manager will incur heavy transaction costs as he or switches between stocks in search of a winning formula. According to Mr Shuttleworth, the average active manager does about five times as many transactions as an indexer.

Add in the fact that trustees can be assured of a decent performance from a tracker (they will not be top of the pack but. far more importantly, they will not be bottom either) and it seems likely that indexing will make further gains. That would certainly seem

to be the view of Barclays de Zoesa Wend Investment Management, which last year took over Wells Fargo Nikko Investment Advisors to create a group with some \$250bn under management, including \$200bn in indexed form. Other managers noted for

their strong bottom-up philosophies are having to move loser to the indexed route. Fidelity, the US fund management giant, continues to insist that stockpicking drives returns, but assures its institu tional clients that its 10 largest positions will be no greater then 25 per cent of the group's



"active money." The latter is defined as the difference between a stock's index weight and the actual weight in Fidelity's portfolio. Fidelity's aim is to provide superior returns while reducing volatility.

In the international context. the issue of index-tracking is tied up with a debate about the relative merits of balanced and specialist management. A fund could either match the world index, with accordingly heavy weightings relative to its peers in Japan and the US, or make its own asset allocation decisions, and use, where possible, index funds specific to each country.

But asset allocators do not have that impressive a track record, meaning that the gains from matching the indices can be lost by incorrect country selection. The answer to this problem may lie is some sort of mechanical rebalancine

Passive managers are also at a disadvantage in inefficient stock markets, notably those of emerging countries. In Korea, for example, local investors are fixated on the par value of stocks and avoid highly-priced shares; as a result low-priced shares tend to have high price-earnings ratios and vice versa. Such markets create greater opportunities for active managers to bent the index.

The debate is certain to rage on for a while. And it is of far more than academic interest. Coopers & Lybrand's Mr Shuttleworth says that indexed funds have outperformed active managers by 0.5 per cent in the UK in the last 10 years. "This may look small, but if maintained indefinitely by a company whose actuary says an annual employer's contribution of 10 per cent of payroll is needed, the 10 per ent will fall to 8.5 per cent. At the profit and loss level, for many companies 1.5 per cent of payroll is serious money.'

E Quantitative techniques: by Barry Riley

UK resists quant invasion

The conservatism of pension fund trustees has limited the growth of these methods

Though the majority of quantitatively-managed portfolios are run passively - which means that they track various stock market indices - there are strong incentives for quant managers to get into the active management business, where fees can be much higher.

This is big business in the US, where pension plan sponsors are much readier to allocate money to non-traditional investment managers than in Europe. But in the UK, in particular, quantitative firms find it very difficult to persuade trustees that they should do something a little differently from their peers. "In some ways the UK is the toughest of the lot," says Ms Jennie Paterson of Barr Rosenberg European Management.

One quant firm, Panagora, which operates out of Boston and London, is currently trying to tackle this marketing blockage head on by launching a balanced product in the UK, called Structured Balanced Strategy.

"People are not interested in strategies that are not explainable," says Mr Anthony Simpson, Panagora's head of marketing. The product offers familiarity, in that it is benchmarked, for example to the WM 2000 asset allocation. At the same time it aims to use quantitative techniques to add value both on a top-down asset allocation basis and at the bottom-up stockpicking level.

What exactly do quants do, apart from giving their firms peculiar names that usually begin with P or Q? The definitions are becoming increasinely blurred, because these days many mainstream fund managers use quantitative techniques, at the very least to measure and constrain their risks against their benchmark.

In principle quants rely on purely statistical or systematic methods of choosing between individual stocks or asset classes. Typically they rely on powerful computers to crunch the numbers in databases and use optimisation techniques to



Jennie Paterson: offering active products to UK pension funds

choose the best markets to be in, based on past volatilities and correlations.

Another approach is to analyse the factors which are driving the market, as London firm Quorum does, closely tracking measures such as price-to-book or other value indicators across a number of European stock markets.

High-powered US-based investment gurus are now focusing on the potential of the European pension fund market place. The investment manage-ment firm set up by Californian one-time academic Mr Barr Rosenberg, for instance, has recently picked up a £50m active UK equity account for the Kingfisher retail group. It has also won mandates in the Netherlands and Scandinavia. Rosenberg has developed

active equity products for leading markets such as the US. Japan and the UK and also seeks global mandates. Although performance went through a bad patch a few years ago it claims its valuebased formula is delivering outperformance of between 2 and 4 per cent a year, with the UK at present near the top of

The Nobel Prize-winning Modern Portfolio Theory pioneer Mr Harry Markowitz has also developed active equity products for the US, Japan and the UK. He is working in partnership with Japan's Daiwa Securities, and has a marketing link with Commercial Union in the UK where, its products are marketed under

Mr Markowitz admitted to experiencing problems in making his model work for the UK, largely because the data was not as good as in the US or Japan. Following its launch last year, the design of the Cudos UK fund design has been tweaked with the aim of ruling out a repetition of the fourth quarter underperformance. This was a consequence of underexposure to Glazo (due to a ceiling on holdings in individual stocks) and a lack of exposure to investment trusts. So Cudos UK underperformed the market by about 1

per cent in 1995, entirely because of the fourth quarter. Its objective remains to deliver the All-Share return plus 1.5 per cent, over rolling threeyear periods, net of fees.
Other London quant firms

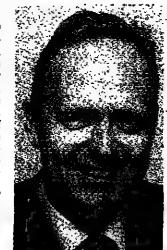
have focused on a variety of products. Pareto Partners, for instance, has taken on a lot of currency overlay work for US pension plans, which involves controlling currency risks separately to those from underlying investments, and ideally edding extra return.

US pension plans are also interested in so-called tactical asset allocation (TAA), in which quant techniques are used to optimise allocations to equities and bonds globally.

There are plenty of tempting possibilities here. For instance, one firm, First Quadrant, has done interesting work to show that simple rebalancing to a benchmark can add significant value over an extended period. But a recent investigation by the performance consultants World Markets, covering 28 fund management houses. mostly from the US, suggests that TAA's benefits - if they exist - are hard to pin down.

The quantitative investment management side of the Barclays Bank group has now become the world's biggest quant manager through the takeover last year of the investment side of Wells Fargo. Although BZW Asset Management, as the combination is now called, is best known as the dominant manager of index funds, worth some \$180bn at the end of last year, it also runs some \$70bn in funds with active strategies, mostly using forms of TAA.

The number two in the field



in the US, State Street, is also

well established in London. and has been promoting emerging market strategies where it relies on a combination of asset allocation judgments and local index funds. So far many of these active quant firms have gained most of their business by selling global products to the US or specialist funds to the Continent. The big opportunities in the very conservative UK pen-

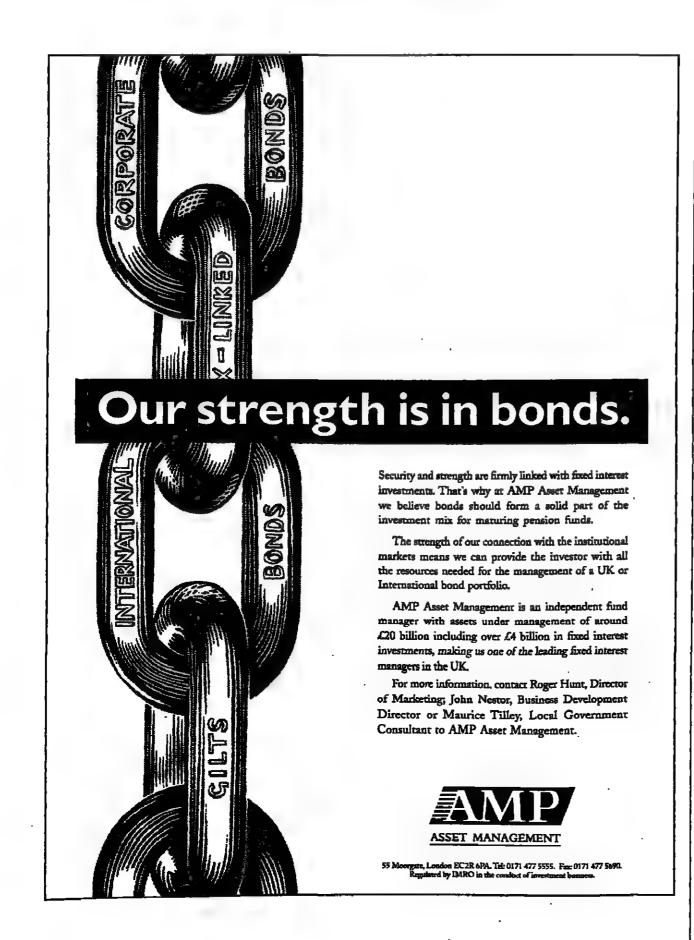
largely untapped. Panagora's new approach is to spurn the normal specialist route and go for mainstream balanced accounts, presumably reckoning that there are many pension funds out there stuck with disappointing traditional

sion fund market remain

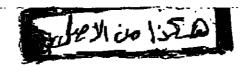
balanced managers. Simulations indicate that the firm's systems can deliver reliable top quartile performance after fees, on a three-year rolling basis. Unlike conventional UK belanced managers, who rely almost entirely on stock selection to outperform. Panagora aims to add value through asset allocation too.

Other people don't have any disciplined tools to make the asset allocation decisions," claims Mr Colin McLatchie, the firm's chief operating officer in

But the history of quant shows that all too often it can be a tough task to turn simulated outperformance into the reality of long-term client satisfaction - and doubly difficult in the field of UK company







PENSION FUND INVESTMENT 3

Boards have to clarify their aims

Pension scheme trustees will have to state their investment objectives

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The Bush The same The Pensions Act, which takes effect next April, is a watershed in many respects.

Its most revolutionary aspect is the way it codifies the duties of scheme trustees, and in particular, those duties relating to investment.

It requires trustees to set out ment policies including details of expected returns and risks. This is a tall order. "The guidance in the Act on the con-

tents of the statement is not 100 per cent clear." according to actuaries William M Mercer and Co. What remains ambiguous is just how far trustees must go

towards setting out their expectations of returns and in the past, Mercer notes, trustees have had problems putting specific investment objectives into practice, particularly when they have asked an investment manager to follow a strategy similar to that

of the "average" pension

scheme. Such a strategy has

often produced a stream of

returns differing little from asset/liability study to gauge those of a scheme's peer group but which may not have investments are likely to prothose of a scheme's peer group but which may not have matched the demands for cash generated by its liabilities. The whole area of invest-

ment is a bit of a grey one," says Mr Trevor Crowter, part-ner in the actuarial practice at accountants KPMG Peat Marwick. "Certainly trustees will have to set out their aims and objectives, but so far, the wording is so vague that no one knows what that means." Further clarification is due

this summer from the Depart-ment of Social Security, but even then, it will be up to trustees to interpret the rules. One question which remains unclear is whether trustees will be required to conduct an



duce the cash needed to pay pensions. While it is generally accepted that equities outper-form gilts over the long term, gilts are the investments carrying the surest guarantee of steady future cash flow. And the increasing maturing of the average UK pension scheme suggests that trustees must reallocate their investment portfolios more heavily in favour of

gilts in order to reduce risk.
Data from WM Company shows that currently most schemes have done little to match their assets and liabilities. A review of 154 schemes showed only six whose investments in "real" assets - equi-



ties and property - were less than 70 per cent of the total. These included a group of "super mature" funds which conventional wisdom says

should have been heavily invested in gilts. The Act does not ask trust-

their strategy poses.

Mr Gordon Bagot, director of research and consultancy at performance measurers WM Company, says that trustees of a well-funded scheme who expect their employer to be around for a long time to come can justify an investment strategy designed to maximise returns rather than reduce

risk. And that he says, means running a portfolio heavily

weighted in equities, even

when current and deferred

nensioners outnumber contributing members.

After all, investments in UK equities over the past 10 years have delivered the best long-term results, two percentage points a year ahead of the next best asset class, overseas

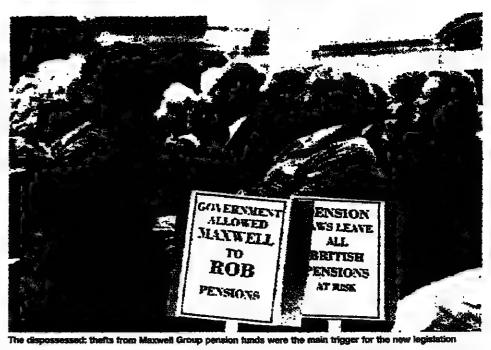
equities and bonds. However, Mr Bagot concedes that this strategy might require the company to add cash occasionally in a year when investments provide insufficient returns to pay penterm interests of the company to take the risk of having to put cash in periodically." Mr

Bagot says.

The difficulty with this, he notes, is that the Pensions Act. which is based on the work of ees to run a totally risk-free a committee chaired by Profes-investment policy. They must sor Roy Goode, gives the simply understand the risks responsibility for setting investment strategy to the trustees. But it is the company. the ultimate provider of the needed cash, which must really make the decision about how much risk to take on. If trustees make one assessment of risk and the employer another, confrontations are likely to

ensue, Mr Bagot notes. The new Act poses other troubling questions for trust-ees on the investment front, he adds. For instance, if trustees decide that it is really appropriate to alter the asset mix. when should that shift occur? "Do you want to move into bonds when interest rates are at their lowest and then get killed when they rise again?," Mr Bagot asks. And if they make the wrong decision, could trustees be said to have failed in their fiduciary responsibilities to scheme members?

It is easy to imagine the sorts of discussions that trustees will be having with their advisers in trying to come to



grips with their legal obligations on thorny questions such

Indeed consultants say that one by-product of the Act will be demand for more and better trustee training. Mr Roger Urwin, senior partner in the investment practice at actu-aries Watson Wyatt and Co says that while most trustees mean well, they too often do not have the skills required of them under the new law.

"Trustees" attitudes are duties the new Act delegates to right, their integrity is of a trustees; the selection and

very high order," he said, speaking at a WM Company forum. "But their skills and backgrounds are just not up to running a big, complex financial institution like a pension

And when it comes to setting an investment strategy which is inconsistent with the consensus of a peer group of pension funds, many trustees will be reluctant to act, he says, There are other investment

appointment of fund managers, custodians, and other advisers. responsibilities for trustees spell new headaches, they also are likely to lead to better run schemes, consultants say. "We believe that to get the best out of the Statement of Investment Principles (required under the Act), schemes really need to address their objectives," consultants at William M Mercer say. "This is a very good thing to do, with or without the

■ Custody: by Norma Cohen

Funds wake up to the dangers

High investment costs and tougher client briefs are prompting a

shake-up For pension fund trustees, the custody of scheme assets had historically been, at best, a dull housekeeping issue. Dull, that is, until the late Mr Robert Maxwell disappeared over-

board five years ago. The Maxwell affair alerted trustees to the possibility that there are more ways to lose money than simply picking the wrong asset mix. Assets, they learned, can go missing overnight if one is not careful, and by all accounts the level of vigilance has increased.

Since Mr Maxwell's death there has been a sea change in what trustees expect from their custodism. Not only do they require gold-plated guarantees on the safety and security of assets, but they want to day where their securities are, what yields they are returning and where their cash is.

The growing demands placed on custodians by pension scheme trustees and administrators has hastened one of the most fundamental changes in the industry. The need to invest constantly in information technology has caused a significant number of providers to decide that they no longer want to be in the business at all.

Over the past year, US-based

JP Morgan sold its global cus-tody business to Bank of New York - a move also made by Bank of America. National Westminster Bank sold its custody business to Lloyds Bank, while Prudential, the UK's largest life insurer, abandoned its in-house custody operations. UK fund managers Henderson Administration and Barings Asset Management

have done likewise. One of the forces driving the nsolidation, consultants say, is the new Pensions Act which specifically gives trustees the responsibility for selecting a

Pension funds were badly shaken by the collapse last year of Barings, the UK merchant bank whose operations included a substantial fund management division and a securities held for clients by the custody business were safe from claims by creditors, the client cash had been placed on deposit at Barings banking division. Had the buyers of Barings, ING Bank, not agreed to make good the liabilities over £800m in client cash

could have been at risk. Mr Robert Kay, partner at Global Securities Consulting custody, says that if anything, the Barings collapse has hastened the tendency for pension schemes to choose a custodian separate from its fund manager. "The trend is only one way," Mr Kay says. "The first

Clients want to ensure, first that the custodian of their cash is financially sound. Second, he says, they want to know that their investments are dispersed among several becomes insolvent, they have only lost a relatively small portion of their assets.

Beyond narrow concerns about the custody of cash, the collapse of Barings has made trustees focus on the financial strength of their custodian. One of Baring Asset Manage

ment's first acts after it was acquired by ING was to announce that it would abandon its in-house custody arm and select a "custodian of choice" for its clients and negotiate a bulk contract which would get them better terms than if they found a new custodian individually. Barings' move, consultants

predict, is likely to be followed by many UK fund managers own custody service. Indeed, SG Warburg, the former par-ent of fund Mercury Asset be talking to prospective buyers for the MAM custody and fund administration business



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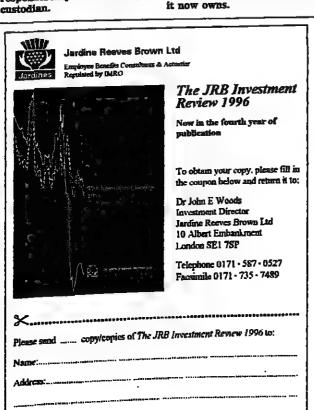
All in all, an attractive investment record

for our clients.



*Source: The WM Company.

Past performance is not necessarily a guide to future performance. The value of investments can fall as well as use and the investor may not get back the amount he has invested. Prudential Portfolio Managers Limited is regulated by IMRO.



■ Defined contribution schemes: by Jonathan Guthrie

Risk-averse employers warm to money purchase plans

The patience of managers with money purchase expertise could be rewarded soon

From July 1 new members of Barclays Bank's pension plan will pay their contributions into a defined contribution (DC) scheme. This means the bank's old defined benefit (DB) scheme will shrink in years to come, as its 67,000 members retire and its £7.7bn in assets are paid out in pensions.

Investment managers predict that many large companies will follow Barclays' lead. As its name implies, only the contribution level of a DC scheme is fixed in advance. The size of the member's pension depends on how well his or her individual investment fund performs. The employer does not have to pay higher contributions if performance is poor, as is the case with a DB scheme, in which members' pensions are set as a proportion of their final salary.

Moreover sponsors of DC, or money purchase, plans will not have to meet the cost of complying with complicated rules on solvency that will be imposed on DB schemes by the Pensions Act.

An crosion of job security in the UK labour market means that employers can switch to DC provision without seriously damaging relations with existing employees or competitiveness in attracting new ones. According to a recent survey by third-party administrators Hartshead Solway, more than half of schemes considering changing their benefits structure thought they might introduce money purchase plans.

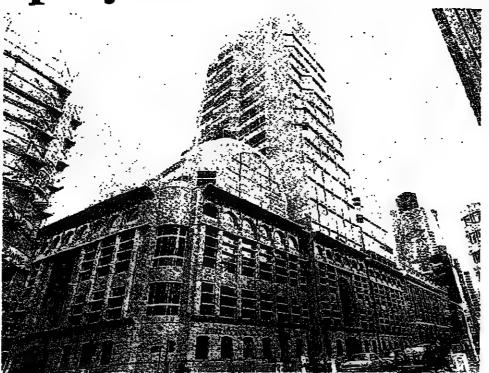
DC plans recently include WH Smith Standard Chartered. Pearson - the owner of the Financial Times - and Legal & General.

DC plans have always been popular with smaller employers. Insurers such as Prudential, Sun Alliance and Scottish Equitable have traditionally serviced this market, providing investment management and scheme administration in a single package.

City investment managers have rushed to set up DC investment services with the aim of winning some of the new business emerging from big employers. This group of providers includes Mercury Asset Management (MAM). Gartmore, Schroders, Flemings, Fidelity and Morgan At present these latecomers

are like surfers paddling around on a calm sea, waiting for a big wave to pick them up and carry them forward. The assets of DC plans are small compared to those held by DB mes - just £10bn out of a total pension fund market of £600bn, according to one estimate, But they should build up rapidly as the swelling stream of contribution payments is boosted by stock market

Mr Philip Beale, director of Institutional marketing of Fleming Investment Management (FIM), says: "What is attractive about the market is its growth potential. We were expecting that it could grow to between Libbu to Libbu in the next 10-15 years. The Pensions Act has made us revise that upwards to £50bn to £100bn." Those investment managers. who, like FIM, are not inte-



Barclays Bank is just the latest big British employer to set up a DC plan to provide benefits for new embants

grated departments within a large insurer, are estimated to manage little more than £1bn in DC scheme assets. But they are catching up rapidly. According to the magazine year ending in March 1995 Mercury Life - an insurer whollyowned by MAM - received premiums of £165m from DC schemes, just £10m less than the Prudential. The previous year it took only £77m against the Prudential's £450m.

Traditional investment managers have an important advantage over insurers in the hattle to manage the assets of big companies' DC plans: a cosy relationship with benefits

Cynics say the consultants are unlikely to recommend an insurer offering investment and administration as a package. They can make more money by advising the client to use a specialist investment manager, and supplying the administration themselves.

According to Mr Alex Welland, managing director of Gartmore Pooled Pensions: With final salary schemes the focus of customer service is on the trustee, but with money purchase it is on the member as well." The latter is often given the chance to choose

how their fund is invested.

Freedom of choice means freedom to make the wrong choice. An example would be a member approaching retirement who gambles his fund on volatile Far Eastern markets. According to received wisdom he should really invest in lowgrowth, low-risk securities. such as gilts, to lock in long-term capital gains.

To avoid blunders such as these many providers allow trustees to bar members from using their riskiest investment

Some investment managers and insurers also offer their corporate clients DC schemes

■ Investment consultants: by Jonathan Guthrie

plan. These switch members' funds from high to low-risk investments as they age, assuming they do not want to make their own investment choices. Younger members' funds buy assets that deliver long-term growth at the price of short-term volatility, such as equities Older members' pots are invested much more heavily in gilts. Lifestyle plans are designed

that incorporate a "lifestyle"

to benefit members who do not want to make their own investment choices - usually a majority of around 80 per cent. according to Mr Beale of FIM. And in theory they should produce higher fund values at retirement than the investment methodology adopted by those insurers who put all money from DC schemes into managed and with-profits funds. The gilts weightings of these pooled investments - up to 25 per cent for some withprofits funds - can prove too high for younger members, but too low for older counterparts.

Investment managers take a risk-averse attitude to investing DC assets. This reflects the objectives of their corporate clients, who have little to gain from a high-risk, high-reward strategy. There is no scope for contributions bolidays or a return of surplus. And if investments perform badly, the resulting cut in pensions income will make the scheme's trustees and sponsor hugely unpopular with members.

DC plans' investments are harder to administer than those of DB schemes. This partly explains why invest-ment managers charge 20 basis points more for managing a DC plan than a DB scheme. Managers have to keep track

each member, who sometimes takes a proprietorial interest in bow it is handled. For example members and trustees expect contributions to be invested far more quickly than peers with final salary schemes

Making tax reclaims on investment returns is a bugbear for investment managers who place their clients' DC funds in their own range of unit trusts.

Those integrated into or affiliated with an insurer have an advantage here, because they can pay back tax into their taxexempt funds gross. In coutrast unit trust firms have to split reclaims laboriously between the tax-exempt investors who use their ranges of unit trusts. This is one reason why some investment managers, including MAM, have set up life offices as a springboard for entering the money purchase market. Few big employers who are

establishing money purchase plans are winding up their old final salary schemes. Most are running the two in parallel. The approaches they adopt range from allowing new entrants to choose between joining a DC or an DB scheme, to restricting membership of the latter to their existing Some companies are introdu-

cing bybrid schemes. These allow the employer and employee to sollt the risks of poor investment performance. If the member's fund performs too poorly to provide a pension worth a given proportion of his or her final salary, the sponsor will make up the difference. But if it beats this benchmark, all of the returns from its outperformance are used to boost



client as well as the trustee



the pension.

These plans allow employers to reduce their pensions liabilities while reassuring employees that bad investments cannot seriously damage their level of retirement income. If they are widely adopted the battle for dominance between DC and DB schemes will have been resolved in a very British

■ Corporate governance: by John Kingman

's reluctant activists

The voting power of investment managers has placed them centre

Thanks to this year's hard-fought battle for Forte, Britain now has something rather unusual: a well-known investment manager. Because Mercury Asset Management held big stakes in both Granada and Forte, the bid shone a powerful spotlight both on MAM and its vice-chairman,

Ms Carol Gailey. It also fuelled the debate over investment managers' power and the ways in which it is exercised, institutional investors are increasingly seen as the front line in the battle over corporate governance.

The reason is simple. The voting powers that investment managers' substantial shareholdings confer represent the most effective potential check on directors' freedom to run companies as they please. As concerns about corporate governance have grown, so the potential for institutional investors to make companies change their policies has been

increasingly stressed. Inevitably, some have found the investment managers wanting. Sometimes, as in the Granada bld for Forte, they have been criticised for wielding too much influence. Conversely, they bave been stracked for not bothering to exercise the power they have selling their stakes in companies they have lost confidence in, rather than taking the tropble to address deficiencies of strategy or management.

Investment managers say their job is to maximise the return on their funds, not to police the wider public interest; anything else would be inconsistent with their duties to the pensioners, for whose benefit the funds are managed. But others worry that if institutional investors do not bother to press for change. nobody will. The Cadbury report, for instance, stressed the importance of investment managers seeing it "as their responsibility as owners, and in the interest of those whose money they are investing, to bring about changes in compawhere necessary, rather than selling their shares". Sometimes, of course, they



have little choice: where instiintions hold big stakes, selling out can be difficult, giving them a powerful incentive to work with companies to improve shareholder returns.

Both the Greenbury and Cadbury reports produced codes of practice which companies were expected to follow. Neither expected pressure from institutional investors. on its own, to provide a solution to the corporate governance problem. This is not only because

institutions can choose to sell the securities they hold. It is also because issues of public concern may not worry investment managers. For instance, they may have no difficulty with a company they invest in paying a big salary to an executive who has delivered big returns, even though public opinion is against it.

On the other hand, they cannot afford to ignore "fat cat" salaries altogether. It is, for instance, in their interest as investors to encourage as close a link as possible between remuneration and shareholder returns. Moreover public storms over pay can damage shareholders' interests: the furore over the large salary commanded by British Gas's chief executive Mr Cedric Brown, for instance, almost certainly hit the British Gas

share price. In practice, where investment managers have published corporate governance policy statements, they have tended to shy away from executive pay, the most highlycharged of all corporate governance issues, leaving it to company remuneration commiltees to handle.

Trustees and investment managers are becoming more



Cedric Brown: row over his pay

active on other issues. Certainly they are voting at companies' annual general meetings more than they used to.

The trade body of the pension fund industry, the National Association of Penslon Funds, believes they should do so, and even offers a ing companies against a range of corporate governance criterla and highlighting contentious resolutions requiring sharebolder approval. The NAPF also encourages

pension fund trustees to develop voting guidelines within which, if necessary, delegated voting authority can be granted to investment managers. This is the approach taken, for instance, by the rail pension fund. RailPen's trustees have issued a set of voting guidelines for their investment managers to follow, but expect "political, outstanding or worrying" issues to be referred back to them.

Several investment managers have meanwhile produced their own guidelines, explain-

ing how they exercise the voting powers they wield on This approach fulfils a

recommendation of the Cadbury report that institutions should publish a statement of their policy on voting rights. But it has been far from universally taken up. One reason is that many

doubt whether guidelines can fully capture what corporate governance is about. Mr Hugh Stevenson, chairman of MAM, says: "A formal checklist inevitably overlooks some of the things that matter most to us, such as the quality of non-executive directors, or that corporate strategy is right."

Mr Derek Fowler, chairman of the RailPen trustees, agrees: What is more important to our stakeholders - the pensioners -is whether the judgment being exercised by company directors is shareholders' interests."

As RailPen's corporate governance paper puts it: "Ensuring boards are in control of the business, act effectively and have a sound strategy is more likely to achieve higher shareholder returns than 'hygiene' factors. British investment manag-

ers have traditionally exerted discreet pressure on companies behind closed doors. Some believe a more direct approach is now needed. For instance Calpers, America's largest public pension fund, has suggested that British institutional investors should jointly set up an institute to improve management at underperforming companies.

So far proposals like these have tended to receive a cool reception: many British investment managers simply prefer

to work quietly. The debate over trustees' and fund managers' methods is evolving fast. Once guide lines are published, pensioners - on whose behalf they have, after all, been established – will be able to comment on them. They will also be able to hold trustees and investment managers to account, asking how far they have complied with the guidelines in particular cases.

Mr Fowler says: "It won't be long before pensioners start asking 'how did you let this company get away with suchand such for so long?' Once you get that, corporate governance will really come to life."

few big firms dominate Scope for cross-selling gives large actuaries an advantage in this

business The need to diversify druve British actuarial firms into investment consultancy. There was little scope for growth in their core husiness actuarial valuations of pension funds. Extracting more income from clients meant selling them a

new product. That product - advice to pension fund trustees on selecting investment managers has been highly successful. The investment consultancy

division of Watson Wyatt, the benefits adviser whose clients include the pension funds of 40 of the FT-SE 100 index's members, now has 50 consultants chalking up billable hours. compared with a bandful at its start eight years ago.

The unit, along with competing departments at firms such William M Mercer, Sedgwick Noble Lowndes, Hymans Robertson, Bacon & Woodrow and Alexander Clay, is busy developing a range of other services.

The most successful of these is the asset/liability study. a comparison of a fund's potential future income with its likely outgoings. Demand is brisk from maturing funds those who face paying out more money to pensioners than they receive from investments and contributions.

The introduction of a minimum funding requirement (MFR) via the Pensious Act has also boosted custom. This measure, which will be implemented from 1997 onward, will encourage funds to match their investments and their financial

obligations more closely. Mr Paul Haines, investment director at Sedgwick Noble Lowndes, says: "The issue for investment consultants is not calculating the fund's current position in relation to the MFR, but whether investments will perform well enough to avoid breaching the guidelines

Most UK investment consultancies have a particular advantage in updertaking asset/liability studies. Unlike their US counterparts, which are often stand-alone operations, the majority are integrated into actuarial firms. This gives them instant access to data and methodologies useful in understanding their clients' liabilities. Meanwhile a fall in the cost of computing power has allowed them to increase the sophistication of the service they can offer. Investment consultants aim

to diversify geographically as well as in terms of products. They are establishing new outposts around the world. Their aim is to provide research and advice informed by local knowledge, but which conforms to consistent global standards.

There are three main prizes at stake. The first is to advise clients based in one country on

Yalue Elm Watson Wyatt 123 28.0 7.7 6.3 3.5 William M Merce Recon & Woorkma

performance and manager selection in another, as investment becomes a more international business. The second is to sell a consultancy service to multinationals that covers all their pension funds in countries around the world. The third is to establish an early presence in countries that are setting up funded plans for the

The UK arm of William M

DOS CORDA MONOY MARRO

Mercer is playing a lead role in speurheading the US-based benefits consultant's push into investment consulting in Europe. In May 1995 it took over the investment consulting firm Klein Haneveld in the Netherlands, a country with many big pension funds. This year it set up an investment consulting business in Spain. Mr Robert Baker, deputy head of William M Mercer Investment Consulting, says his firm is taking on an increasing amount of cross-border work for multinationals.

the periphery." Mercer's most obvious international rival was formed in 1995 when US benefit consultant Wyatt took an effective 10

adding "Often our role is to tell

the centre what is going on at

per cent shareholding in UK counterpart R. Watson, Both companies adopted the name Watson Wyatt (WW) in a combination which executives insist on referring to as an "alliance", but which for operational purposes looks like a

The firm's investment proc tice is busy standardising research from offices around the world. It is also relieving its management structure, moving the former head of its US office. Mr Mark Scott, to the UK to take up the newlycreated post of head of international investment consulting. His immediate boss, Mr

Roger Urwin, head of investment consulting worldwide, has built up a strong UK practice, capitalising on referrals from the firm's actuaries, who specialise in advising big schemes. As a result WW bas a dominant position in running large investment manager selection exercises. For example, Equitas, the reinsurer of old claims against Lloyd's of London, recently appointed WW as its adviser in choosing

managers to run funds that could be worth up to £10hm. According to the newsletter

Global Money Management, last year WW advised on 25 publicly-reported mandate contests, worth \$8.6bn in funds under management, William M. Mercer's, its meanest competitor, had 23 publicly-reported adviserships, on tenders worth just \$1.9bg.

Many mandate contests counreported and consultancy sources say WW actually advised on 99 selection exer-

cises for funds worth \$16.7bit. WW's dominance mirrors that of a few pension fund investment managers - performatice measurer CAPS says 20 per cent of them invest 82 per cent of the money held in halanced segregated accounts, Privately, investment managers who win few mandates claim WW outly recommends a handful of hig investment managers

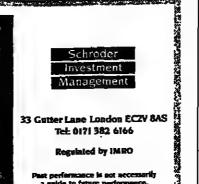
for possible selection. Ms Jane Wetsh, a sentor investment consultant at WW admits: "Inevitably if you're looking at placing very large portfolios you're restricted in the number of firms that can deal with them." But she says that her department takes a far broader view of the market than criticisms suggest - during 1995 it researched 100 investment managers and included 59 on short lists.

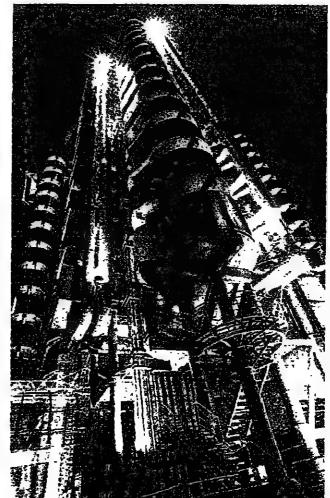
A consultancy, Cygnet Management Services, has recently been set up to help investment managers sell their services to investment consultants and pension funds. Co-founder Mr Charles Anderson says: "There are well over 200 investment managers in the UK and a long list for a selection exercise is unlikely to include more than ten...Cygnet feels that some remarkably strong investment managers are not being brought to the attention of the

consultants." Pension funds sometimes fire investment managers whose performance fallers. But they do not sack their investment consultants for recommending them in the first place. Watson's Wyatt's Ms Welsh comments: "They understand why we've put particular managers forward, but ultimately it's their decision."

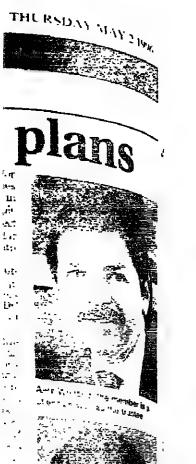
The beauty of the business, like any consultancy work, is that the adviser advises, but the client bears the risk.







Equitas, reinsurer to Lloyd's, is running a huge manager selection



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Interview

View from the top
Chris Galvin
of Motorola



Focus

Mobile Computing

Dynamic sector is

set to take off

Software at work

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processing
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Recognition How s
Learning to live together perform

IT companies
How shares are

Information Technology

FINANCIAL TIMES REVIEW

Wednesday May 1 / Thursday May 2 1996

Businesses fail to halt 'Ram raiders'

A spiralling crime wave is causing growing concern among law enforcement authorities, insurers and the business community, writes **Paul Taylor**

rmed thleves and so-called "Ram-raiders" have helped turn chip theft into a multi-billion-dollar industry worldwide, and computer "hacking" and virus attacks are on the increase.

Computer theft is already the fastest-growing crime in the UK. Nevertheless, studies by independent consultants such as KPMC and Ernst & Young show that physical and other security is often lax and businesses are still doing too little to protect themselves from attack. In some cases, the consultants warn, this puts the very survival of businesses are still doing too little to protect themselves from attack. In some cases, the consultants warn, this puts the very survival of businesses are still the little to the l

While the personal computer and computer network have become important business tools, they have also emerged at the heart of a spiralling crime wave which is causing growing concern among law unforcement authorities, insurers and business representatives.

Dependence on computing power carries obvious risks. According to a Loughborough University study, 70 per cent of businesses that suffer computer failure of one kind or another will be out of business within 18 months.

Similarly, the latest Information Security Breaches Study by the National Computing Centre which covers more than 7,000 separate incidents, notes that almost 20 per cent of reported security breaches had a "significant or serious impact on the organisation", and in 30 per cent of thefts and 16 per cent of all incidents it took more than a week to restore operations.

Nevertheless, a recent study by Ernst & Young revealed that although IT security was a big concern for managements in Britain, more than a third had no security policy.

A similar study by KPMG showed that 98 per cent of organisations in the UK and Ireland failed to implement the BS 7799 "Code of Practice for Information Security management." The majority of organisations also fail to meet the three key controls affecting physical security

which, the firm points out, "are particularly important in the light of recent terrorist incl-

Specifically, threequarters of the companies surveyed do not have a designated security officer, 77 per cent have no formal procedure for reporting security incidents, and 87 per cent do not have a business continuity plan.

findings, Mr Michael
Bacon, director of information security services at
KPMG said: "Given the value
to organisations of both computer equipment and data, it is
extremely disturbing that such a
large number have failed to implement these basic security requirements."

Rather than the theft of complete machines, most physical computer crime involves the taking of components, especially valuable microprocessors and memory chips. In Britain alone, thefts of chips are estimated to have cost British industry £1bn last year, with insurance claims approaching £200m. The largest single incident of any type recorded by the National Computing Centre involved a theft which cost an estimated £750,000.

Often the crimes are blamed on organised gangs, some armed, who have discovered that personal computers, chips and other components are easy to carry, difficult to trace and worth more than their weight in gold. The average thief can easily stash more than £200,000 of stolen computer chips in a rucksack. In the US, where chip theft - including armed hold-ups at Silicon valley semiconductor plants - is rife, one insurance company estimates the problem will cost companies \$200hn worldwide by 2000.

Virtually no organisations are safe from the crime wave although the majority of premises attacked have been commercial. Targets have

t is much a imple squire componicro-

ranged from multinational manufacturers to national newspapers, public utilities and local government offices

The average computer is likely to have about 2500 worth of chips inside it, and is often sitting on a desk secured by only two screws in the computer case. Meanwhile, most chips are unmarked and even it stolen chips are recovered, it is usually impossible for police to discover where they have been stolen from.

One way to make the tracing of computer chips easier would be for manufacturers to label them with pin numbers. Intel, the world's leading microprocessor manufacturer, does label batches of its Pentium processors with identification num-

bers and IBM has started numbering its memory and processor chips. However, most chip manufactur-

ars argue that labelling individual chips with unique numbers is impractical and would be too costly.

To combat physical computer crime, a wide variety of protection measures have been developed.

Physical restraints, such as hardware cases and tamper-proof bolts are used to attach the machine to a desktop or floor but are unsightly and can impair the users' productiv-

Alternatives include plug-in card motion detectors and electronic tagging systems for components. These are usually based on wireless radio transponders which can trigger local and/or remote alarms or even spray indelible dye over the components. Other security products include invisible identity tags which show

invisible identity tags which show up under ultra-violat light, microdots, smoke bombs and chemical mixtures designed to produce a a unique "fingerprint" which helps identify the components. However, some computer manufacturers have suggested that some of these prod-

ucts might invalidate warranties.

Several companies have also developed software programmes which monitor networked computers and their components.

ers and their components.

Some of the new anti-theit products are on display at Infosec 96, the UK's first big IT security exhibition, at London Olympia this week.

panies more than £1.2bn a year with incidents rising at 12 per cent a year. Computer networks are particularly there are an estimated 8,500 com-

estimate that breaches cost UK com-

puter viruses in circulation with between 150 and 200 new viruses being written each month, mostly by young and male computer wizards, Some virus authors have even

formed "cyberpunk" gangs dedicated to causing damage and mischief. For example, one gang is called Vlad (Virus Labs and Distribution) while another is called Phalcon-Skism (Smart Kids Into Sick Methods).

While writing a computer virus is not an offence, damaging data is. Recently, the "Black Baron" was jailed for 18 months for causing more than \$500,000 of damage with his SMEG viruses.

his SMEG viruses.
In North America, a recent report on computer viruses conducted by the US-based National Computer Security Association, suggested computer viruses will cost North American businesses between \$55n and \$65n this year, up from just \$15n last year.

The NCSA study, which involved 300 large organisations, discovered that 96 per cent had experienced computer virus attacks – and at least half of these involved the macro virus which affects Microsoft Word documents.

"The losses stem from costs related in finding and eliminating these viruses, as well as computer down-time," said Mr Peter Tippett, NCSA president.

"At least half of the increase in losses has been caused by the new macro virus which is spreading fester than any other type of virus as it can travel by e-mail and can prove difficult to detect because most users do not scan documents for viruses."

Since the start of the year, most of the leading virus protection software vendors including McAfee have launched new products capable of detecting and deleting macro viruses.

However no amount of "firewall" security or anti-virus software will prevent attacks from within. Most studies suggest that 80 per cent of computer abuse is caused by insiders.

And virus attacks and backers are not the only IT threats to businesses. According to Blick Rothenberg, chartered accountants, as much as £2bn a year is being wasted by British companies because of computer misuse and "time-wasting including 'surfing' the Internet". Some 10m people in the UK now use computers in their work and if they only waste times minutes a day each then this alone costs British industry £1bn a year.

"Computer crime is now rife and

spreading at epidemic levels," claim

the show's organisers. More than 100

companies are exhibiting their latest

IT security products, and the organ-

isers have prepared seven fact sheets dealing with security "hot

topics" such as encryption, disaster

Indeed, while physical computer crime steals most of the headlines,

computer crime also encompasses

other activities such as backing and

sations have suffered an IT security

breach, according to data prepared

by Ernst & Young and the Department of Trade and Industry.

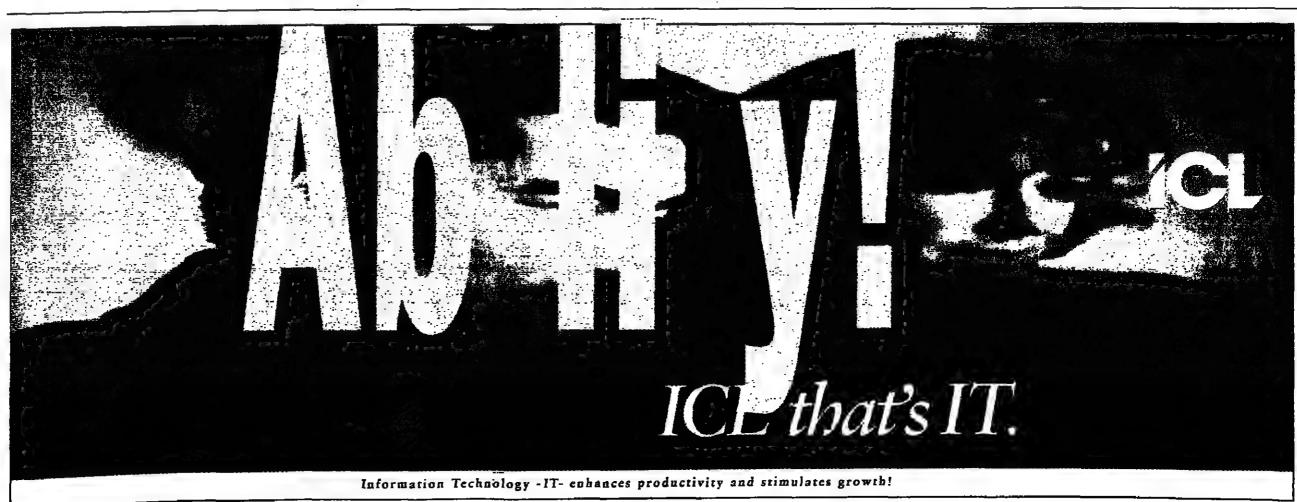
In the UK, 80 per cent of organi-

recovery and virus protection.

virus attacks

While most of the losses to business are due to computer misuse, Mr Mark Ryan, Blick Rothenberg systems manager, said: "It varies from surfing the Net, to unauthorised computer use like the copying of software and more users than a licence permits, to poor documentation, data thefts, amendments to processing and data and computer

Mr Ryan believes that much of the loss is recoverable if business puts simple controls and management procedures in place. But if they do not, he warns, "the problem will grow and cost a great deal more."



Chris Galvin, president and chief executive of Motorola - Interview by Paul Taylor

Ready for the next surprises

In order to help stimulate innovation, Motorola holds annual technology 'road map' meetings where business groups look at technologies 10 years ahead

Galvin and his brother Joe, proved adept at creating and exploiting new markets for the group's technology - a strategy which has helped the Chicago-based electronics group grow into a business with worldwide sales last year of \$27bm.

Today, Motorola is the world's largest supplier of wireless communications equipment, its semiconductor business leads the world in many of the markets it serves and it is frequently cited as one of the best run and most innovative companies in the world. "We create markets," says Mr Christopher Galvin. Paul Galvin's grandson who is Motorola's president and chief operating officer. In the early days we largely created the auto entertainment industry in the US - that is where the

name comes from." When Motorola's founders began building car radios in the early 1930s there were no other suppliers and no market research. Despite this, Motorola's initiative led to the birth of a new industry. "That really began a pattern," says Mr Galvin, who first joined Motorola as a part-time employee in

Since its beginning in the back streets of Chicago, Motorola has pioneered the two-way radio, pagera, cellular talephony and, most recently, satellite communications through the Iridium consortium which is building a global satellitebased communications net-

In many cases, new businesses have grown out of old ously adapted to better fit customer needs. For example, Motorola developed voice paging - effectively half of a two-way radio - for doctors in the 1950s. Next came digital numeric paging, then alpha-numeric paging - and now two-way paging which has been introduced in the US. Round the corner there is a new technology that allows for

rom the outset. Moto-rola's founders, Mr Paul paging service. "It is like putpaging service. "It is like putting a telephone answering machine in your pocket," says Mr Galvin.

"One keeps seeking new ways to combine science and technology to create a new service for a carrier, or a new way to have a person communicate in some more convenient way." To support this, Motorola continues to invest heavily in research and development spending: £3.2bn last

"Motorola is a high technology business; that is where our engineering competence drives the value," says Mr Galvin. We learned early that it was better to start something than to attempt to wait until the market was well known and then compete.

"We try to be first in innovation - that gives us a significant edge."
Although Motorola is now

probably best known for its wireless products, including the ubiquitous cellular telephone which accounts for about 60 per cent of the group's sales, it has not always been that way. "For years we were known as a semiconductor company; we could never communicate to anybody that we were in the communications business," says Mr Galvin.

In fact, semiconductors, which account for 29 per cent of sales and have been growing at a compound annual rate of 23 per cent since 1991, remain a key part of the business. "Semiconductor technology is really one of the underpinning core competences of the institution," says Mr Galvin. The group's semiconductor products, which are mostly sold to external customers, include integrated radio circuits, control circuits and computing circuitry.

So where is Motorola concen trating its R&D investment today? "We continue to invest in what are called the derivative opportunities in all our known businesses," says Mr Gavin, who joined Motorola's board in 1988

In semiconductors, he says Motorola is always trying to augment basic process technology - to shrink geometries, lower power consumption and make smaller, cheaper products while seeking out new applications for products such as microcontrollers and memo-

ries in smart cards. For example, deploying an airbag used to involve a device called a "mechanical accelerometer" which measures the rate of deceleration using a weight and a spring built into something the size of a fist. To replace it, Motorola has developed a microcontroller device the size of a fingernall.

"You can go through all of our businesses and create what we think are very interesting derivative kinds of opportuni-ties," says Mr Galvin. "We try to look for opportunities where the technology is changing... where there are new opportunities, for example the move from complex instruction set computing (Cisc) to reduced Instruction set computing (Risc) or the advent of hybrid fibre-coax cable."

📉 imilarly, Motorola has positioned itself to play a part in the evolution of the information superhighway through the development of cable modems which emerged from a group of Motorola cellular engineers looking for an alternative - and perhaps less expensive - way to connect cellular base stations instead of running it across the telecoms network by leasing lines or using microwave links.

In fact, cable - which pumps data down standard cable television circuits at high speed - turned out not be an optimal solution but someone figured out that the technology could be used as a low-cost way to transmit multimedia-rich data such as interactive television. video-on-demand or internet Web pages into homes. "It illustrates the way we keep our minds open to things," says Mr Galvin.

in order to help stimulate innovation, Motorola holds annual technology meetings where business groups look at technologies 10 years shead. We literally lay out the road map of the technologies and where they will go," says Mr

the creation of a master map. But Motorola also insists on a minority report or a non-consensus report.

It was at one of these meetings that the first idea for Iridium emerged. "A fellow stood up and said 'Please don't chuckle but I believe I can take the cellular switches and the base stations and float them in low earth orbit satellites around the world and people will be able to make a cellular telephone-like call on every square metre of the earth other than the densly-populated downtown areas because of the line-of-sight and communications issue."

"Everybody was totally sured and said it was impossible because no such thing had ever been done before, but within about 30 minutes we committed to what turns out to be a multi-billion-dollar proj-

"We committed the first 10 engineers to study it, and then the next 10 because we sam if it ever worked it would be quite spectacular. So you don't bet the whole bank the first day, but you go off and study whether or not it would be pos-

sible and we think it is." Iridium is designed to enable mobile phone communications in places where the current cellular system does not reach. Mr Galvin emphasises that it is a complementary service targeted at business travellers or diplomats or those with unique remote business applications. Because it will only accommodate 1.2m or 1.5m users worldwide, it can only really target the top 1 per cent or so of mobile communications cus-

However, Mr Galvin also notes that "If you give human beings a chance to communicate in some place they thought they could not before, they find very unique ways to justify and need that product once it is made available." This is intended to be a

niche market, but if its succeeds then ultimately it may create a low earth orbit, highvolume satellite business. "It doesn't means it is not a

risk; these are large projects," says Mr Galvin, "but we think the technology is solid, and financing is coming along. There

we think these are the right kinds of risks for us to take for our shareholders."

But Motorola, which employs 142,000 people across the globe, also invests heavily in training and upgrading skills through the 'Motorola University'.

"When you get right down to it, an institution is just a group of people that are joined together by a set of ideas and principles." he says.

ne of those principles is quality. "Quality is really a way of serving the customer and then, secondarily, for our shareholders, by lowering costs. We work very hard at developing the skills to prevent the possibility for

"That in itself is a renewal process: it promotes reinvention because we keep seeking virtual perfection."

Mr Galvin also has a firm view on the concept of convergence. "We think, based on our experience, that there are so may different problem sets - or so many different ways to evaluate what is an appropriate way to solve that unique consumer or business's problem there will be many, many different combinations of and/or

Galvin. The process ends with are still many challenges but inventions of ways of assisting people in telecommunications. Therefore the concept of convergence, where everything comes down to one product which solves all problems, is an over-simplification.

ple, and why markets are so wonderful, is that people are different, so they value things differently." For companies such as Motorola, that means plenty of business opportunities. The challenge, however, will continue to be spotting those opportunities ahead of the competition.

lar telephone.

"The nifty thing about peo-

'My father gave a wonderful speech at the 50th anniversary of the American Electronics Association," says Mr Galvin. "His message really was that when our company was founded in 1928, my grandfather couldn't see the next 16 surprises. Even when be started the business with battery eliminators he couldn't see the automotive entertainment radio as an industry; he couldn't see the portable two-way radjo; he couldn't see the transistor; he couldn't see cal, trying to serve today's custhe computer; he couldn't see the satellite, a pager or a cellu-

is where you generate the revenues and the cash flow to "None of those things he could see. So we like to orien-

tate ourselves in a general way the next era you will have to while always being very practi-



because things will accelerate. We like to think we are preparing ourselves to recognise the next possible surprise.

look for the next 32 surprises

R&D keeps software at the leading edge

SAS Institute has managed to balance technical excellence with a pragmatic approach to

business and a caring approach to its 3,700 employees nlike many of his con-

temporaries, Mr James Goodnight, co-founder and driving force behind SAS Institute, US-based software developer, generally keeps a

While software entrepreneurs such as Bill Gates of Microsoft and Larry Ellison of Oracle are rarely out of the limelight, Mr Goodnight, SAS Institute's president, prefers instead to write code in his his collection of geological

pecimens.
But while neither Mr Goodnight, nor his company, which specialises in analytical software and information delivery tools which make managing a business easier, are household names, SAS Institute and its flagship product, SAS System, are widely acknowledged to be

SAS System is an integrated suite of information delivery tools which include Executive Information Systems, data warehousing, client-server computing, database access. applications development. graphics, data analysis, report writing, quality improvement, performance evaluation and

decision support.

Mr Goodnight and his team of dedicated software engineers, many of whom have graduated from local universities, have quietly built the privately-owned company based in Cary, North Carolina into the ninth-largest software group in the world. Last year sales increased by 17 per cent to \$562.4m, marking the Institute's 19th year of double-digit

growth. "The industry's trend towards data warehousing pro pelled us over the half-billion dollar mark," noted Mr Goodnight when he unveiled the latest results in February. "As the only vendor providing a complete back-end-to-front-end data warehousing solution. coupled with the industry's leading business intelligence and applied analysis software for exploiting the warehouse, we anticipate strong revenue growth in this market through

1996 and beyond."
With the launch of the Orlando release of the SAS System late last year, the Institute continued to see more of its revenues come from the desktop. Last year, 61 per cent revenues was derived from personal computer and Unix soft-

"By platform, the desktop continues to bring in a larger portion of new business for us," says Mr Goodnight, "however the mainframe is certainly not dead. Total revenue from PC software rose 36 per cent from 1994 to 1995, while Unix software revenue jumped 37 per cent, and mainframe revenue increased 13 per cent. This shows us that organicaucts in client-server settings." Despite its financial success

SAS Institute still likes to think of itself as a college rather than a husiness, hence the "Institute" in its title and the gymnasium, rackets court and creche in the wooded grounds of its campus-style headquarters. Its UK subsidiary is housed in Wittingdon, a renovated mension on a substantial estate new Marlow in Buckinghamahire.

Since founding the company 20 years ago, Mr Goodnight, a graduate, statistical computing expert and professor at nearby North Carolina State University, has emphasised research and development and customer

SAS Institute has traditionally led all the main software vendors in terms of the percentage of its revenues devoted to R&D. Last year, the comor 31 per cent of its revenues on R&D. The spending was boosted by the creation of two new R&D groups. The first, a data warehousing department. was formed in April last year to address the expanding infrastructure requirements for building and managing corporate-level data warehouses as well as departmental level "data marts". New automation

extraction, distribution, data

are currently under development for release later this

The second group, formed late last autumn, is the Business Solutions department which is targeting packaged solutions as well as continuing to develop SAS Institute's other horizontal and vertical product offerings.

SAS Business Solution for Financial Consolidation and reporting, unveiled serlier this year, is designed to enhance decision-making by addressing the key IT and information issues encountered by finance directors. "Financial control is one of the keys to competitive advantage," says Mr Good-

"Our large investment in R&D is what keeps our software on the leading edge, thus distinguishing SAS Institute from its competitors," he says. vately held company and not required to listen to a group of shareholders who are only interested in quarterly profits. Instead, we see our custom-

ers as our 'shareholders' and our pledge to them is to continnously evolve our software to best meet their organisations' unique information delivery

SAS Institute's blue-chip customers include big companies

se Goodnicht: We see our ners as our shereholders

(66 per cant of the installed base including 97 of the top Fortune 100 US companies), government agencies and universities. Every year the institute distributes an annual survey - the SASware ballot - among its 29,000 customers. Responses to the ballot provide a foundation for future devel-

SAS Institute, like its founder who still writes code, has managed to balance technical excellence with a pragmatic approach to business and a caring approach to its nearly 3,700 employees. There are no current plans to float the company, although Mr Goodnight acknowledges that this may eventually be necessary - if only to minimise estate duties.



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Philip Sanders Mriters in this issue (volume two, number four) include: Paul Taylor, IT Correspondent, Louise Kahoe, Nuala Moran, Torn Foremski, Rod Newing, Philip Manchester, Michael Dempsey, John Kavanagh, Geoffrey Wheelwright, George Black, Marcia MacLeod, Malcolm Wheatley

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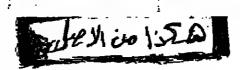
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Mobile computing

Mobile computers are helping companies to hone their competitive edge - By Paul Taylor

Toys' become business tools

The market for portable PCs continues to be one of the most dynamic segments of the global computer industry. World sales of mobile computers are forecast to more than double from \$30bn last year to nearly \$80bn by the end of the decade



Focus

Mobile computing: the portable PC provides an extra dimension to computing

he portable personal computer, and the nota-book PC in particular, has established itself as a mainstream business tool helplog individuals, companies and other organisations to maintain or extend their competi-

Used in conjunction with fixed or wireless communications links, the portable PC provides an added dimension to computing, one which can help boost customer service, improve productivity and provide additional workforce flexi-

Reflecting this, the market for portable PCs continues to be one of the most dynamic segments of the global computer industry - fuelled by the growth of flexible working, particularly in the US and the demand for "feature-rich" notebook machines.

"Companies are acquiring portables in record numbers. indicating pent-up demand for the flexibility afforded by being mobile," noted a recent study of the European market for portable PCs prepared by International Data Corporation for Dell Computer.

World sales of mobile computers will more than double from \$30bn last year to nearly \$80bn by the end of the decad an 18 per cent compound annual growth rate, according to a recent study on pen, paimtop and notebook computers prepared by Frost & Sullivan,

sized devices which used to be known as PCMCIA cards – are Nevertheless, the IDC report known as PCMCIA cards - are expected to increase their share of market revenues from 4 per cent in 1995 to 9 per cent in 2001 as demand for "connectivity" in the form of modern devices, mobile data cards and network adapters continues to

Pen-based mobile computers, mostly used in vertical markets, and paimtop or hand-held machines such as Psion's Series 3 organisers or Hewlett Packard's LX series are expected to hold a steady 2 per cent of the market while portable printers decline from their cur-

rent 1 per cent market level. "Pen technology is still fighting for acceptance outside healthcare and insurance vertical markets, where it has found strong growth for both pen tablets and PDAs (personal digital assistants)," say the authors of the Frost & Sullivan

While most analysts now accept that pen computing will not replace keyboards, despite

recognition software, pens are expected to evolve as an increasingly popular comple-mentary input method. Meanwhile, the palmtop market - in the US in particular - has been revived by the introduction of HP 200LX machine which leatures two-way wireless communications. The morriage of hand-held

PCs and wireless telephony - in new devices from Nokia and Motorola as well as ing hand-held machines such 35 the Psion 3a and HP 100LX - is re-igniting interest in the pocket-sized computing market following disappointment with first generation PDAs such as early Apple Newtons which lacked wireless communica-

tions facilities. However, notebook and smaller sub-notebook machines are expected to continue to account for the vast majority of world mobile computing market revenues. Portable computer sales are growing twice as fast as desktops in some markets as companies replace desktops with portaes, often sold with docking stations or port replicators enabling them to plug into corporate networks easily.

Mr Guy Swarbrick, business

development manager in charge of mobile computing for Dell in the UK, says that 70 per cent of Dell's portables are sold with port replicators.

"Continuous price and performance improvements make the decision to substitute por tables for desktops easier," says Frost & Sullivan. "Businesses in Japan commonly use portables now as their primary computers.

There is further evidence of this trend. According to an independent study conducted for AST Computer last autumn, 43 per cent of respondents said they expected that the notebook PC would replace the desktop machine to some extent and 31 per cent claimed to have already seen some evidence of this trend.

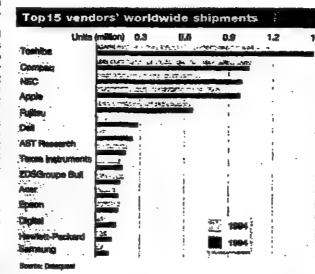
The same study suggested that the increased amount of home working was a key factor driving corporate portable PC purchasing decisions - 82 per cent said an increase in homebased working was accelerat-PC cards - the credit card- ing the take-up of notebook

for Dell suggests that despite the high adoption rate for portable computing, many compa-nies are failing to get the most out of their machines. In Europe, for example, less than half the companies using portable PCs support remote communications, even just for e-mail. In the US, that percentage exceeds 80 per cent and the most common application for portables is e-mail.

For those companies that do take advantage of what mobile computing has to offer - which may mean reshaping applications and support - this creates a unique window of opportunity," the report says. "Companies have a one-time chance to gain competitive advantage simply by being smart about their usage of portable comput-

Other findings from the IDC study included the revelation that almost a third of European mobile PC users share their systems with colleagues improvements in handwriting and most still use their desk





top system as their primary machine. In contrast, in the US, the portable PC is the primary system half the time at large and medium-sized companies, and less than 10 per cent of mobiles are shared.

Optimising applications for mobile computing can be as simple as providing remote plex as developing enterprisewide sales force automation applications that rely on major back-end databases," says IDC,

"but almost any effort will be rewarded. Simply allowing users to work in new venues - at customers' sites, at home or on the road - can increase productivity and job satisfac

The corporate decision to invest in portable computing has been made easier over the past year by a number of significent dev looments. In particular, as Mr Murray McKer-Toshiba's product marketing menager in the UK,



ok market leader, says 55 per cent of its machines are sold with STN (Super Twisted Nematic) screens. But higher quality

World pr	ocesso	rmarke	et share	for mob	ile PCs
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quality "active matrix" TFT (Thin Film Transistor) screens are gaining market share as greater manufacturing capacity and higher yields help erode the price premium.

longer-life Lithium Ion batteries - which provide considerably more power than earlier Nickel Hydride technology while weighing much less - are becoming the norm on top-end machines. Most of the leading notebook manufacturers have also recently introduced machines based around intel's Pentium 133Mhz processors as they attempt to differentiate between entry-level and premium-priced machines.

Despite this, Datequest, the market research firm, argues that it will be tough to differ-"Making things even tougher is the shift towards 'value' notebooks," says Dataquest. "The feature sets are now

'good enough' on value prodacts and do not ask users to make sacrifices in terms of performance. We expect solid unit shipment growth this year, but differentiation - other than on price - will be tough."

Portable machines still sell at a marked - although reduced - premium to their desktop counterparts. Two years ago, a portable machine cost 2.8 times the price of a comparable desktop; now the premium is down to 40 per

and relatively healthy margins means that no serious PC manthe portable market. "Eighteen months ago, notebook PCs were perceived as executive toys," says Mr Swarbrick. "Today, notebooks are perceived as genuine tools - the mobile road map is much clearer to the industry than it

notes the performance gap between desktop machines and their portable counterparts has been narrowed significantly.

Intel, the leading microprocessor manufacturer, has targeted the portable market for growth, bringing out lowpower versions of its Pentium microprocessors packaged for the portable market much more quickly than with previous microprocessor generations. Meanwhile almost all manufacturers have abandoned the market for mono screens. For the moment, "passive" STN (Super Twisted Nematic) screens still account for a majority of sales - Toshiba, the notebook market leader, says 55 per cent of its machines are sold with STN screens. However the higher

often the most difficult part of Larger colour screens and

Nevertheless, strong sales

Smaller and cheaper

Hand-hold devices - By George Black

One of the main growth areas is in field systems, particularly delivery services

C mail hand-held devices have spread widely among many businesses in the past couple of years. workers who had no previous experience of computers.

Their usefulness has grown as they have become smaller, lighter and more robust, able ing it and to be used longer before batteries run out. Their small screens have become easier to read and they are easier to operate.

Communication with head office by modem is easier and cheaper, so travelling workers do not lose time on the road. Most importantly, the price of the equipment has come down

The world market for han dhelds and portables for business use (myluding palmtops but excluding laptop and larger machines) is valued at about £1bn a year and growing at 15-20 per cent a year, estimates Husky Computers, a leading UK-based manufac-

Many types of worker who use only a few business appli-cations and who do not have to make presentations on their screens, may find it is not necessary to incur the expense of a laptop computer. They can manage better with something cheaper and lighter.

For many applications involving on the spot data cap-ture, a device which can literally be held in one hand may be preferable to a laptop or otebook which cannot. Software development is

adopting handhelds. The software frequently has to be custom-written because the applications tend to be specialised and standard business packages cannot easily be tailored. Manufacturers often work closely with value-added resellers (VARs) and users to

produce the software. Most sales are made through VARs rather than direct sales teams. One of the main growth areas for handhelds is in field systems, particularly delivery services. Rugged handhelds with touch screens instead of keyboards can solve many of

Before going on the road, van drivers collect their hanentiate on processors alone. dhulds known with the filmerary and delivery schedule. The machine sits in a cradle in the cab. During a visit, a receipt can be printed out and the customer's signature on the touch-screen can be stored as proof of delivery.

Because these nearthings ownally employ a standard Microsoft DOS operating system, the quickly transferred to a sentral computer system.

A number of big UK-based companies have adopted this technology in the past couple of years. BP Oil, for example, uses hand-held devices from ACS Data in its trucks in the UK and Germany.

Mr Graham Douglas, its technology development manager, says the devices have simplified paperwork, saved money and pleased both drivers and customers. "It saves 400,000 delivery

notes per year in the UK, so it is environmentally good as well as giving a substantial reduction in time spent on He notes that handhelds held devices, especially for cal mass.



ing into the most demanding work puts the power of MS-Dos compu ions. BT uses Husky handhelds for allocating work to tech

used in vehicles carrying haz-ardous chemicals have to be certified as safe. Some handhelds designed for general business use may not be sealed, so there might be a

risk of creating sparks. Air Products has equipped its drivers in six European countries with ACS Data devices, making it easier for them to record accurately details of deliveries and collections of gas cylinders.

Mr Hugh Coverley, project manager, says: "We concluded that keypads were too difficult and we needed a touch-screan system. We did not want to have to teach the drivers to

"They were sceptical at first, but they took to it very quickly because they did not like the paperwork and this

Mobile field systems may be appropriate for many users

got rid of most of it." These mobile field systems may be appropriate for many other types of user - from couriers to airlines' in-flight dutyfree sales staff, to public authority building inspectors, to gas, electricity and water

British Gas's service engineers carry Panasonic notebook computers, but its meter readers and other visiting staff, with more limited and structured information requirements, carry Psion handbelds. Thames Water engineers and water readers also use Psion machines.

BT prefers Husky handhelds for allocating work to its technicians, although many of its

Financial services companies, which usually give laptops to their sales people for demonstration purposes, often choose to give handhelds to staff whose job is to collect cash from customers' homes. Service organisations of various kinds have adopted handrepair customers' equipment Suppliers to shops, pubs and hotels use hand-hold devices to

engineers who maintain and

take their orders on the spot and transmit them back to their base. This cuts the delivery time and can help to speed up invoicing. Manufacturers, distributors

and retailers have started nsing hand-held rugged scanning devices for their stocktaking operations.

Scanning of ber codes is pre-ferred to keyboard input because it is much faster and less error-prone. Some devices have the added

advantage of being able to operate at a distance. Some can be strapped to the back of the hand so that the hand can be used to pick things up without having to put the device

By capturing all the neces sary information at a single swipe of a bar code, scanners save a lot of time. This also enables the data to be transmitted easily to headquarters for analysis, which helps the company to identify best-sellers and worst-sellers and to plan accordingly.

Radio is becoming the preferred method of communication from the warehouse, telling the manager at once that the right order has been picked, generating the paperwork for the transaction and triggering a re-order when stock gets short. Hand-held scanners are

therefore increasingly seen as electronic commerce.
The use of hund-held devices

may spread not only among service providers but also among their customers. Retailers are assessing the

effectiveness of hund-held selfscanning devices for use by shoppers. Safeway supermarkets are already heavily committed to these devices as a way of reducing queueing time for customers.
Other supermarkets are

watching Safeway's progress. The question now is whether that movement will gain criti-

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Motebook PCs - By Tom Foremski

Increasingly the first choice

is becoming more powerful, more reliable, lighter and better-suited for a wide variety of tasks

otebooks are more expensive than desktop systems and have lagged behind in terms of the latest technology but as their prices fall and vendors bring out improved models, notebooks are increasingly being chosen instead of desktop

IBM estimates that by the end of 1997, about 80 per cent of its PC sales to business customers will be notebook computers. And US market research firm Dataquest predicts that the mobile computer market in 1996 will grow by

This category of PC 15 per cent growth rate in 1985. manufacturers such as Toshiba Notebook computers represent the largest segment of the mobile computer market and this category of PC is becoming more powerful, more reliable, lighter and better-suited for a wide variety of tasks with large hard drives, brighter colour displays and add-on CD-Rom drives.

Notebook computers have tended to lag behind the latest microprocessors available for desktop systems because they require special versions that operate on 3.3 volts rather than 5 volts, to conserve battery life. But intel is trying to narrow the gap and release versions of its Pentium microprocessors for notebooks within several months of the desktop versions becoming available.

Falling hard drive prices and special low power drives are also more readily available, endowing notebook computers with plenty of data storage capacity. And leading notebook and Digital Equipment have introduced modular notebook computers that allow peripherals such as CD-Rom drives to be easily added by users as they need them.

But the greatest boost behind the increased popularity of notebooks is changing business practices; many large organisations are changing the way they organise their offices.

Some staff no longer have a permanent office desk and instead reserve time at a company office in a similar way that they might reserve a hotel room. Their files and personal effects are stored in moveable file cabinets and when they return from a road trip, from working at home or from working at a client's site, they book time at a deak in the home office and simply plug their notebooks into the office local area network.

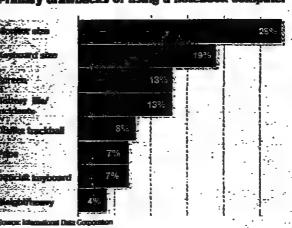
"More and more people travel from office to office and notebooks allow them to take everything they need with them," says Mr Bob Cushing, European marketing director at 3Com, which makes Lan cards for notebook computers.

This way of working allows companies to assign a computer to an individual rather than to a physical location. The computer becomes more of a personal computer than the desktop PC."

According to Dataquest, the leading manufacturers of mobile computers are: Toshiba, Compaq Computer, NEC, IBM, Apple Computer, Fujitsu and Dell Computer.

The key trends this year are

for lighter notebooks such as Digital Equipment's HiNote Ultra II, which is among the thinnest and lightest, at about 4lb. Dataquest notes that in 1996, most notebook computers will be built around powerful pared with Intel 486 DX4 sors which formed



the core of most notebooks shipped in 1995.
"As the market completes

the progression to the Pentium architecture this year, we expect a major shift in product mix for the top vendors in the form of a major emphasis on value notebooks," said Mr Mike McGuire, senior industry analyst at Dataquest.

These value notebooks will be cheaper models without me of the high-end features

Notebook computers are still more expensive than desktop computers and they offer PC manufacturers a chance to make some money and escape the razor-thin profit margins on desktop computers.

But producing a notebook computer is not easy, and several PC companies have faltered because of the increased development costs required and the manufacturing chal-

intel's efforts should help to ■ Portable moderne and multifunction PC cards - By Philip Marchester

make notebooks easier to man-stress key features such as ufacture - and also cheaper for

Intel is already the largest producer of motherboards for desktop systems. Motherboards hold the core electronics of a PC, the microprocessor, memory and other associated chips. PC manufacturers often buy motherboards instead of designing their own, to get into the fast-changing PC market

more ouickly. Intel is discussing plans to manufacture notebook motherboards. With a notebook motherboard from Intel, a computer manufacturer just needs to add a case, keyboard, display and some extra chips.

Intel is likely to upset some of its microprocessor customers who would prefer to keep the notebook market a difficult one to enter for newcomers.

With an Intel notebook motherboard, virtually any company large or small, will be able to offer a notebook computer, leading to more competition and lower prices for customers. However, Notebook manufacturers will still be able to differentiate their products with custom designs that

weight As more staff choose notebooks instead of deakton PCs, organisations face new challenges in supporting those

Notebook users tend to play around with the configuration of their systems more often. which leads to problems running some applications. They also tend to load non-standard software. And it is also more difficult for companies to make sure that their notebook users have the latest version of software applications because the computers are off site so much

of the time. Ensuring that staff are using the latest data files, such as price data, or sales figures, is another challenge that requires good synchronisation software that can automatically update notebook

But despite such challenges, the future for notebook computers is assured, and it takes the PC into a more flexible environment, matching changing work styles and

■ Docking stations and Lan cards - By Tom Forenski

New products on the way

For many notebook users, local area network cards are a good option when docking stations are not available

ocking stations and local area network (Lan) cards are the key bridging technologies that turn notebook computers into full featured computers, capable of rivalling the best

desktop systems. As corporations upgrade their systems. many employees are choosing notebook computers in combination with docking stations and Lan cards that allow them to access peripherals such as CD-Row drives and office Lans. New developments in docking stations and Lan cards have made these products more affordable and also improved them - and new products out later this year promise to make this category of computer products even bet-

Docking stations provide notebook users a way of plugging the notebook into a series of ports that give them access to peripherals such as full-sized keyboards, desktop monitors, Lan connections and storage devices such as hard drives and CD-Rom drives. One disadvantage of most docking stations has been that they do not allow what is called "hot docking" plugging a notebook computer into a docking station while it is on and running an application.

Microsoft Windows 95 supports a feature that allows notebook users to plug into docking stations while the notebook is in a suspended mode but not all dock-

docking station then restart the computer - a time-consuming process that most users would rather avoid. This situation is set to change with a new chip set developed by Intel called the 380 Dock Set which will allow notebook makers to create docking stations that will allow users to dock their notebooks while they are still on. The chip set will be available by the middle of this year and the first dock-ing stations based on the chips should be

out by the end of this year. Other companies, such as PicoPower, are also offering hot docking technology. PicoPower's SmartDock products will be available later this year in a chip set offered to docking station manufacturers. With SmartDoc chips, the docking station automatically detects if the notebook computer is on, and also allows users to nnect their notebooks without danger of data loss. It will also reconfigure the system automatically, depending on the status of the notebook.

Compaq Computer is also working on its own hot docking technology. However, se different hot docking technologies are incompatible, which means that users must be careful to use the right type of docking station to ensure compatibility with their notebooks.

Docking stations also very in what feetures they offer and are available in a variety of forms from simple port replicators to more sophisticated versions that allow users to insert their notebooks into a docking station as if they were inserting a videocassette tape into a VCR, with the port connections made automatically.

For many notebook users, Lan cards are a good option when docking stations are not available. Based on the PCMCIA stan-The notebook user must make sure to connect to Lans, whether at their place of switch off the notebook, plug it into the work or when visiting clients.

3Com, Megahertz, Motorola, and Xircom Because they are based on the PCMCIA standard, cards from different vendors should work with all notebook computers that have PC Card slots.

"One of our most popular products is our modem-Ethernet card which offers two functions yet just takes up one card slot," says Mr Bob Cushing, European marketing director at 3Com. "This allows users to plug into the office network and also work from home."

Lan cards are also increasingly found in versions that operate on 3.8 volts, which helps to conserve power for notebook users and extend battery life. This makes the Lan cards more compatible with note-book computers which operate on 3.3

Wireless Lam cards are still in development - but could further add to the value of notebook computers. With a wireless Lan card, no physical connection to a Lan through Lan eards or docking stations is ry. Wireless Lan connections also mean that companies can move staff around an office more easily since they avoid the expense of running new cables.

However, wireless Lan cards are a lot nore complicated than regular Lan cards which have a physical connection. For one, they are not as fast as an Ethernet card - with data transfer rates in the 600 kilobit per second range rather than the 10 megabits per second rate available to hard-wired Ethernet users. The wireless data rates are fine for e-mail but are frustrating for users trying to transfer large files or applications.

New wireless Lan technologies are being developed that could dramatically

Expanding capabilities

IBM and Toshiba are using a technique called Digital Signal Processing (DSP) to combine many functions into a single adapter

any innovations in PC technology are the result of attempts to make computing mobile. The demands for miniaturisation, low power consumption. improved battery technology, better screen technologies and small, high-capacity disk storage all stem from the need to make computers smaller and

The development of the PC card (formerly PCMCIA) is another example. The PC card takes the place of cumbersome adapter cards which are used to expand the capabilities of desktop computers - typically, to connect PCs to local area networks (Lans) or the telephone network. The PC card, which comes in the form of a "plug-in" module about the size of a credit card, does the same job in a portable com-

Until quite recently, PC cards were built to carry out a single function. But the pushed manufacturers to are shaping the direction by sticking to a design with only two PC card slots or ports. There is no sign that they will increase this," says Mr Joe Nash, export sales manager at PC card builder Portable Add-

"Usually one port is committed to an Ethernet Lan connection and the other to a modem. But if you can double up by putting both on the same PC card you can leave the user with other possibilities for using the other port," says Mr Nash. Portable Add-ons has

recently launched a new range of PC cards which combine network connections, modem and fax features in a single ping-in card - leaving a spare slot in a portable computer for such uses as GSM and multimedia.

GSM stands for General Systems for Mobile - the European-wide standard for cellular telephone communica-tions - and is of growing importance in the mobile computing market.

While the PC card goes some way towards solving the problems of the size and weight of adapter cards, another recent development promises even hetter power-to-weight ratios. Leading portable computer manufacturers IBM and Toshiba are using a technique called Digital Signal Process ing (DSP) to combine many dif-



Smaller and lighter: the water industry uses a Toshiba Portigé in the field

ferent functions into a single

DSP has its origins in the esoteric world of angineering - aspecially for telemetry. speech and acoustics processing. The complexities of unray-. alling high-speed bit streams from measuring equipment or from speech recognition demand a special form of input-output processing. DSP provides this - both to speed up translation of signals from one form to another (digital-analog and vice versa) and to accommodate a wide range of

different signal sources. A DSP microchip can be programmed to bandle any kind of digital signal from a video or audio stream to a communications session. More importantly, it can be changed at any time to process different

kinds of signals. "DSP lets you dynamically program the chip to process things like speech recognition, video and modem use," says Mr Vincent Smith of IBM's personal computer business. "We have incorporated DSP technology into our leading-edge portable computers and see it

as a major change," he says. IBM's top Thinkpad portable computers include a proprietary DSP product called Mwave. It handles stereophonic audio, data-fax modem traffic and full telephony functions, including a two-way, full-duplex speakerphone and telephone answering and voicemail features. IBM is also building the Mwave DSP into its Aptiva brand mass-market desktop computers for multi-

media use. Mr Smith says that DSP is especially useful in portable computers because it acts as a buffer against future technol-

Currently it is more expensive than the PC card option

can process any kind of digital signal by just writing a program. I know someone who is using it to build a radar device at much lower cost than traditional methods. There are all sorts of possibilities," he says. Mr Murray McKerlie, product marketing manager at Toshiba UK, is equally enthusi-

and we are only using it in our

top-end portables. But it is a

good way to insure against

can upgrade the DSP with soft-

ware so, for example, you can

change from a medium-speed

modem to a high-speed modem

by loading a new program from a floppy disk," he says. He adds that DSP offers the

possibility of exciting new uses

for portable computers: "You

tachnology developments. You

"DSP is definitely the start of a trend and we would expect it to have an impact on sales of modem cards in the next couple of years. You can put full voice and data telephone features, network connections and fax in a DSP. You don't need a PC Card modem." he

Last month, Toshiba launched the first of what it expects to be a growing range of portable computers which feature DSP technology. "We have started by putting DSP into the top-range portables. But we fully intend to bring DSP right down the range soon," Mr McKerlie says.
It is only a matter of time before DSP will make current

adapter card technology obsolete - something that third party card-builders must take account of. They have to stay one step

ahead of the PC manufacturers. We are building more functions into portables to reduce the size, weight and the amount of silicon in our products," notes Mr McKerlie.

Fresh strategies are needed

VPN services are one of the fastestgrowing areas of networking. Many companies are turning to outside suppliers to provide their network infrastructure

here was a time when managing a company computer network was relatively simple. The network infrastructure - the cables. connections and software - were all within the boundaries of a company's offices and under the direct control of a company's technol-

But this is changing fast in a world where networks extend beyond the reach of individual company control. Networks in the 1990s are less easy to define and new strategies are needed

if they are to be managed effectively.

M. Managing virtual patworks and wide-area Lans - By Philo Marchester

There are two increasingly popular approaches to the expansion of networks. One is to buy in network services from a virtual private network (VPN) supplier; the other is to extend the reach of established local area network (Lan) technology to the wide area network (Wan) to create a "wide area Lan".

In both cases the aim is to ective.

fastest-growing areas of networking and many companies are turning to outside suppliers to provide their network infrastructure. Using the analogy of the information superhighway, a VPN service is similar to a motorway trunk road; it gives companies a basic carrier service for their data networks.

A recent report from market

from \$3.6bm in 1995 to \$5.5bm in

provide a single view of the company network both from a sage and from a management

VPN services are one of the

researcher Ovum forecasts, for example, that the US market for VPN services will grow

The market in Europe and Asia-Pacific is expected to grow even faster, from \$100m last year to \$7.9bm by 2005. Many companies, however, are looking at extending the

concept of their internal Lans to the Wan so as to retain control over their networking DESCRIPTIONS. "The distinction between the

Lan and the Wan is becoming more blurred - especially in the context of internet and "Intranet"." says Mr Graeme Allan, UK marketing manager cialist Bay Networks. "There is a growing trend

towards managed services like VPN because of the frustration that companies have faced when building and managing their networks. We see the answer in what we call 'smart outsourcing'," he says.

Mr Allen defines smart outsourcing as a way for compenies to keep control of the important part of their network and leave the lower level network transport to the service suppliers: '

"It is important that busies do not throw the baby out with the bath water when they look at outsourcing network services. They must keep some knowledge and expertise in their own organisations. If you give away too much, costs

"If you don't give away enough, then you won't save any money," he explains. According to researcher IDC,

Bay Networks took 51 per cent of the world market for "low end" Lan management software in 1995. Mr Allan says this lead has come from recognising the importance of reaching beyond the Lan and seeing company networks as a whole. Bay Networks' Optivity network management software works on all of the leading

computing platforms from Windows up to IBM. "We have been working for some time to extend Lan concepts to the Wan and extend-

ing our reach to all platforms that commanies use. Our recent acquisition of Armon gives us the opportunity, for example, to see remote network componexts as part of the scheme. More important, it gives us an application view - something that has not been possible in simple terms, the Armon technology allows network

fic in terms of real business applications. It monitors the whole network and lets a company adjust traffic flow accordto specific application Traditionally, network management has concentrated on lower level traffic movement unrelated to the application.

managers to see network traf-

application view," says Mr He adds that it is important for this function to remain

But we see that real manage-

ment of the network is not pos-

sible unless you can get an

pany: "It is essential to keep this in-house. You can outsource the grunt work - the lower level stuff. But you must keen control of the higher level application view because you are the only one who understands the business implications. Managing networks is never

under the control of the com-

likely to be easy - especially against a background of rapidly changing technology. As companies place increasing emphasis on mobile workers and distributed applications, management of the network and those who are attached to it is likely to cause more headaches for network managers Bay Networks - along with other network management

software suppliers such as Cabletron and 3Com - are now able to provide the tools to help. But the final responsibility will, as ever, rest with individual companies. They must take the initiative and adopt a balanced approach which combines their knowledge of business priorities with the technology expertise of

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Mobile computing

Gizmos and gadgets - By Michael Demosey

New arm of the IT industry

Systems that are self-contained and totally portable have special appeal

arian Oncology Systems is a \$1.1bn US corporation that sells radio therapy systems for the treatment of cancer and Mr Adrian Orchard, Varian's quality assurance and information systems manager for the UK, travels to the company's Palo Alto headquarters five or six times a year. On every trip he is accompanied by what he

calls his "little blue friend." This companion is a £149 Zip drive from Jomega which allows users to store large amounts of data on a small device the size of a Walkman The Zip drive slots into any PC or portable with its own special disks containing up to 100 megabytes of data, as opposed to 1.44 megabytes on a typical 3.5-inch disk.

Mr Orchard explains the appeal of the Zip drive: "I present to people within the corporation and I have to carry around presentations that occupy a lot of disk space."

He has found that the Zip drive allows him to load whole libraries of clips and images and he doesn't have to worry about losing masses of data held on the hard drive of his laptop. The Zip drive and its disks will take all the data he needs and the product makes company data more secure.

"I used to back up companysensitive information on the hard disk of a portable PC, but a PC can be stolen. Now I store all the files I'm going to use on two or three Zip disks and keep them in my pocket."

He believes this inexpensive product has made a big difference to the way he works, enabling him to alter sophisticated presentations on the move.

Presentation programs such as Microsoft's Power Point have created their own problems, demanding more and more storage to offer the very facilities that users demand. Mr Orchard sums up the way one small item can resolve this problem: "Zip extends the capability of my Notebook, particularly as modern software is so demanding on disk space."

Iomega has shipped more Lloyds Bank has produced an electronic chequebook package for Palon paintops

ing itself into a \$226m corpora-tion in the process. The very phrase "my little blue friend". which Mr Orchard uses to describe the product, points to the peculiar appeal of IT systems that are self-contained and totally portable.

Users seem to derive intense satisfaction from practical equipment that can be carried on the person - and this is the dividing line between Personal Digital Assistants and laptop

Psion paintop computers continue to rake in cash for this UK company and Psion announced a 48 per cent rise in turnover to £90.5m in 1995. LLoyds Bank is one financial institution that wants to use Psion's success to attract high-flying customers, and the bank has produced an elec-

tronic chequebook package for Psion palintops. Presently on test in the UK, the package allows customers to download a payment order to their bank via a modem.

With 1,800 branches and 7m customers, Lloyds describes this experiment as "just one method of delivering services." But a spokeswoman admits that banks have noticed a gap in the market for truly mobile services. "We're looking at ways to access banks from hotels or trains.'

A 23m High Performance Radio Local Area Network, or Hiperlan, project funded by the EC has recently concluded that traditional computer networks can be replaced with an approach dedicated to the executive on the move. The scheme involved industrial partners such as French aerospace glant

Dassault and academic contrib-utors such as the UK's Bradford University.

Radio links between PCs are already commercially available, but Stephen Barton, Bradford's professor of signal processing, says Hiperlan has proved the feasibility of a more exciting development. "We have built a demonstrator for ad hoc networking. This means laptop users meeting in an airport lounge and networking without any wired connec-

Prof Barton believes that a plug-in card with a 4cm exter sion acting as an aerial will soon allow business users to conduct group work sessions

on laptops in any environment. The demand for serious computing power on the move is unabated. Xyratex, a £280m UK management buy-out from

Apple Commence of the Commence

- a portable drive which retails for £299 and contains 540mb of data, the equivalent of one PC stuffed to the gills with information.

The rise of the Internet has spurred Xyratex to bring this device to market. Well-trayelled users loading huge chunks of graphics and text from the burgeoning number of Web sites guarantee Maxot a ready market.

"It is ideal for Net surfers that want to take a load of stuff off the internet," Xyratex explains. Maxit is designed to be compatible with Apple graphics workstations, and Xyratex reckons the radicallyoriented staff who drive these machines will be proud to wave a brightly-coloured drive about at airport security.

The raft of storage products fits the pockets and needs of on emerging user-class. Mr Paddy Holahan is president of the Irish software house East Coast Development which produces Winlynx Laptop Backup (WLB), a £100 computer pro gram written to allow Zip and Maxit users to blast data onto their cherished gadget

instantly.

Mr Holahan underlines the message that well-travelled computer-literate executives need a new level of security: The laptop market is growing extremely fast, many people use a portable PC as their primary machine and need security to match that." The power offered by physically attractive products allied to the convenience of software such as WLB is creating a new arm of the IT industry.

Taiwanese manufacturer Plustek has latched onto the demand for advanced equipment that fits into a briefcase Its 299 Pagereader is the size of a pencil case and can be plugged onto a PC to permit document scanning on the

Pagereader appeals to the presentation-conscious business traveller who discovers a printed image and needs to insert this into his material instantly. Plustek is only 10 years old, but it has joined the ranks of companies making good money out of a market which is emerging from a marular aesthetics.

With more power squeezed out of batteries,

notebooks can be lighter, smaller and use faster

New technologies - By Tom Foremski

microprocessors which typically use more power

ew battery and screen technologies are emerging that belp to lower the price of notebook computers and extend battery life - to offer users louger working time.

Battery life has always been a key focus of notebook manufacturers and a key limiting factor in the design and weight of notebooks. Early notebook computers had just two hours of operating time between recharges, but the latest battery technologies and special power-saving features have extended the operating life of most notebooks to four hours and more.

Battery technology has always been the weak link in notebook computers. While notebook microprocessors. memory chips and hard drives have grown more powerful every year, battery technology has changed more slowly. This has forced notebook manufacturers to focus on ways of saving battery power by using chips operating on 3.3 volts instead of 5 volts; using power management applications that selectively shut down or idle notebook functions such as the hard drive; and reducing microprocessor speed for sim-

Companies such as Duracell, for example, have built smart batteries - rechargeable batteries with chips inside them to help more accurately gauge how much power is left.

Earlier software-based power gauges were inaccurate, requiring a 20 per cent margin of safety so that users could save files before the power gave out completely. This was scause monitoring how much battery power was available depended on the battery's chemistry, its age, temperature and other factors difficult

Smart battery technology

gives a more accurate figure of power available, freeing up much of the 20 per cent of the power that remained unused.

Innovation is the key

Smart batteries also monitor the recharging process, making sure that the battery is correctly charged, charged to full capacity and helping to extend the number of times the battery can be recharged. Previous methods of rech ing a battery could leave 10 per cent of its capacity uncharged, further limiting battery life. With more power squeezed out of batteries, notebooks can be lighter, smaller and use faster microprocessors - which typically use

more power. Changes in battery chemistry are also important. Nickelcadmium (NiCd), and nickelmetal-hydride (NiMH) batteries are gradually being replaced by lithium-ion (Liion) batteries which offer 2.75 times more energy per unit weight compared with NiCd batteries. But supplies of Liion batteries are limited because there are few manu-

facturers. Li-ion batterles are more expensive and can also be tricky to use, Apple Computer last year found some problems in its PowerBooks using Sony Li-ion batteries which had a fault that caused some units to burst into flames. Li-ion batteries are also more sensitive to recharging and can easily

be damaged by overcharging. Zinc-air batteries are another technology that offers long life, but their use has been limited because of their bigger volume and weight. However, they are useful as secondary batteries that osers can carry with them separately and plug in as needed. They are capable of powering a portable computer for as

long as 12 hours. Replacing NiCd batteries also has important environmental benefits since cadmium is a toxic substance and the disposal of NiCd batteries can be a problem.

Yet another battery technology that is still in its early stages of development but that shows promise, is lithium polymer. This plastic-like battery material is flexible and can be formed into a variety of shapes. Notebook designers can tailor lithium polymer batputer rather than the other way around - and make better use of unemployed space in a

Several companies are also working on manganese-oxide zinc and nickel-zinc batteries. but so far these have shown important disadvantages in terms of limited charge-discharge cycles and slow

recharging. In terms of notebook displays, the key technology focus has been not in the dis-plays themselves but in manufacturing the screens. Creating a liquid crystal display is similar to producing a chip and requires the same attention to cleanliness and accuracy except that the LCD display is much bigger than a chip. Manufacturers have to accurately place transistors behind each pixel; multiple transistors in the case of colour displays. Each transistor must be connected to display control cir-

cuitry.

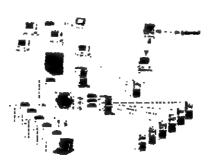
A typical LCD display has 640 by 480 pixel resolution, or 307,200 pixels. Creating a flawless display is very difficult which is why a typical notebook display may have a dozen or more dead pixels without being noticeable. Even with such a margin of error, the number of unusable LCDs produced has been low.

However, improved manufacturing techniques have greatly improved yields, resulting in lower manufacturing costs and lower prices. And as South Korean- and Taiwan-based manufacturers have emerged to challenge the dominance of the Japanese LCD producers, the combination of competition and improved yields has led to much lower prices for note-

book computers.

The ideal LCD display for notebooks, would be one that mimics the high resolution of a paper document. Such a display would need almost 7m nixels and Xerox subsidiary Doix says it has developed such a display. However, DpiX is producing the display in small quantities for custom applications such as displays in military aircraft and it will be several years before the displays can be manufactured in big numbers and at a price affordable for notebook use.

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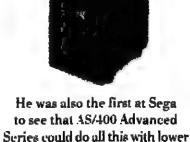
is a client/server network that sends sales data throughout the Sega empire instantly

Behind Bill Downs success in keeping Earth safe from alien life-forms



and the ability to add more power at a moment's notice.





administrative costs than other platforms. If hen your business grows from zero pounds to seven hundred and fifty million pounds in fire

years, choosing a client/server system that can keep up with the growth is pretty important. Which is what Bill Downs of Sega has found with AS/100 Alrenced Series.

"In five years, we probably would have had neo or three different business systems if we had started with something that didn't scale as rusily as AS: 100," says Bill. "None of us had the idea we would grow as fast as we did."

Bill has his AS/100 Advanced Series running the entire business. He's using it to process orders and schedule delivery to 20,000 retail stores overnight. He has his company's PCs, Apple Macs and Silicon Graphics tradistations running off it. And his 48/400 Advanced Series dues all this with a technology budget of less than two-tenths of one per cent of revenue, and with minimal support staff.

If you'd like to see how you can memory business growth at lower cost with AS/400 Advanced Series, call your local IB V dealer. Or visit our home page at http://www.as400.ihm.com

Solutions for a small planet

III Wireless mobile data services - By Philip Manchester

Wintery window of opportunity

Symantec saw a great chance to seed many more copies into the East Coast corporate world

hen the icy blast of winter hit the East Coast of the US with a vengeance last January, and thousands of people were trapped at home, unable to get to work, personal computer utility software maker Symantec spotted an opportunity.

The opportunity was to promote the company's remote access communications software - which could allow snowbound workers to get to work without leaving home.

So Symantec's Dehrina Group announced "Operation Snow Storm", a so-called "relief effort" to make 500 copies of its popular pcANYWHERE for Windows remote computing software available to corporations free of charge (It normally sells for about \$129) to

assist workers unable to reach their offices. Although Symantec claims more than 2m active users for the product, the company saw a great chance to seed many more copies - along with a compelling reason for them - into the East Coast corporate world.

The pcanywhere for Windows Remote Control product is supposed to allow users to work from home, using their home PC to access the office. It requires a PC equipped with either Microsoft's Windows 3.1 or Windows 95. With the excessive amounts

of snow we have experienced. it is becoming increasingly difficult to get to the office. This product enables workers to stay at home and work as if they were sitting at their desk," said Mr Christopher Calisi, general manager of the Communications Business Unit, at the time of the snow

"We are very concerned with the risks individuals are facing this winter, in light of the hazards of travel under such extreme conditions." The software allows employees to dial into their office PC. Once connected, users can log into the network, access documents and remotely operate both Dos and Windows-based applications. Symantec claims that pcANYWHERE further increases productivity by enabling users to remotely access devices on their PCs and networks, such as printers and CD-Roms. "This enables people to remain productive from the comfort and safety of their own home," added Mr

Meanwhile, rival Stac Electronics is hitching its star to the expected success of Microsoft's uncoming release of Microsoft Windows NT 4.0 with the announcement that it will release a new version of Reach-Out its remote access software, following the shipment of the new operating system later this year.

Calisi.

"As more and more corporate users migrate to Windows NT. Stac plans to meet their demands by developing Reach-

Out with a superior design that will take advantage of the 32bit architecture," said Mr John Bromhead, vice-president of marketing for Stac. "ReachOut will deliver the fastest, most reliable performance under

Windows NT 4.0." The company says Reach-

The image on the viewer screen stays synchronised

Out's design allows it to detect screen changes in real time and transmit them to the remote viewer as they occur. Consequently, the image on the ReachOut viewer screen stays synchronised with the user's keyboard and mouse

Stac claims that alternative software saves up screen changes and sends them at intervals, causing the viewer screen to lag behind what the

"ReachOut users see each character as they are typing, rather than having to wait until half a sentence is typed hefore they get any feedback." claimed Mr Brombead. "Reach-Out's architecture provides a much faster response time for

the user." However, all providers of remote access software may find themselves losing market share to Microsoft Windows 95 itself - which includes built-in remote access capabilities. In addition to the ability to dial in to Windows NTs RAS (Remote Access Server). Windows 95 supports dial-in to Novell Net-Ware networks running Net-Ware Connect; dial-in to another Windows 95 machine using the Windows 95 built-in single-line remote network server, dial-in to remote access server products such as those from Shiva Corporation and others; simultaneous support of the NetBEUI, IPX, and TCP-IP network communications protocols and dial-in connection using the popular PPP

Mobile workforce guarantees more growth

Many companies are looking for less expensive alternatives to the advanced digital network services

If there were such a thing as the "ether", then it would be overflowing by now. The ancient idea that the world was surrounded by a mythical substance called the ether is, of course, as plausible as a flat earth. But if it did exist, the ether would be in short supply. It would be full of radio waves, TV signals and

An ever-growing volume of communications now takes place without "wires" and there are signs that the trend will continue. An increasingly mobile workforce and a demand for wireless communi cations services guarantees continued growth

There are several different

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markets for wireless communications services - ranging from mobile cellular telehones based on expensive digital radio networks to lowcost, data-only services based on established analogue ms. While the advanced digital network services generally attract more attention, cost is an important factor and this is leading many companies to look for less expensive

"We can set up a base station for about £25,000, which keeps our costs down and lets us offer fixed rate subscriptions to our customers," says Mr Richard Harris, managing director of UK services supplier Cognito. "Our competitors need about £100,000 to set up a base station and a fullfunction callular telephone network costs about twice

Cognito, set up as privatelyfinanced management acquisition from Ti Group in 1992, specialises in data-only wire-

less services using a proprietary digital networking technology aimed at field service engineering operations. Customers include Rank Xerox and Philips Medical Systems.

"We charge a fixed rate per unit of £50 a month, which means the customers know exactly what their monthly costs will be. We can also link to other networks such as Orange and Cellnet if the cusomer wants the facility," Mr Harris explains.

Typically, users of the Cognito service buy what Mr Harris calls an integrated solution. Cognito provides the radio network - covering 85 per cent of the UK - and the mobile terminal. The customer provides the application We have experience staff

who can integrate the radio system with existing applica-tions. This means a field engineer can receive details of work to be done through the mobile terminal and can notify

Technology

World Congress

central control when the job is include TNT Express, Boots complete. Engineers can also order spare parts through the rminal," Mr Harris says.

The main advantage of this approach, he says is that it removes the need to keep a large number of staff at the company base, making and receiving telephone calls again reducing costs.

There are other advantages: Much of this sort of work involves transposition of data. call from a quatomer is taken over the telephone and the despatcher phones the engineer who writes down the details. On completion of the job, the engineer then notifies the central control by phone.

"But with mobile data services, the data need only be entered once when the customer makes the original call," says Mr Harris.

National Band Three (NBS), another UK services supplier, takes a similar approach - but uses mature analogue radio networking. NB3's customers

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and the British Waterways Board. "Mobile communications is about improving productivity and customer service. If you can despatch jobs through a wireless data service, you can cut costs and improve service," says Mr

By using analogue radio technology, NB3 can offer voice services alongside the data services

Nigel Rodliffe, marketing manager at NB3.

NB3, like Cognito, covers most of the UK. But by using analogue radio technology, it can offer voice services alongside the data services: "We have developed a way of integrating voice and data and can keep costs down for our customers," says Mr Rodliffe.

NB3 charges a fixed turiff of 283 a month for each subscriber. An initial set-up cost of £199 covers the radio termicial customised Psion palmtop computer for data processing at a cost of £699.

"Our sim is to combine technologies that can be adapted to £6m in 1995-96.

to the way an organisation works. This means that we can link up with other computer applications the customer might have - for job despatch, fuel management and global positioning systems for vehicle location applications, for example. And if they have a Microsoft ODBC application, we can link to that as well." says Mr Rodliffe.

He adds that the analogue radio technology, while not necessarily the most advanced, is reliable and robust: "We are not ground breaking in terms of technology. But we are working on making the idea of plug-and-play low-cost radio communications a reality. In our target market, speed is not essential and our technology is very cost effective."

Mr Rodliffe adds, however, that NB3 has plans to introduce digital networking in the near future.

Cognito and NB3 both face significant competition from high-profile suppliers such as Cellnet, Vodaphone and Orange as the demand for wireless communications grows. They remain confident, however, that their pragmatic approach assures them of a healthy market for some time to come. Mr Harris notes, for on target for 50 per cent revenue growth this year. He expects annual turnover to increase from £4.2m in 1994-95



NB3 offers a customised Psion palmtop for data processing

M Data cards and QSM - Sy Rod Newing

Data unleashes the power

Data services have only been available for 12 months but they could become an essential

business tool he handset looks and feels like a telephone. but it is really a fourplatform terminal encompass ing voice, data, fax and short messages," says Mr Simon Farr, product manager for mobile data products at Mercury Communications. "Data unlesshes the power of the digital networks, so there is no reason not to be a member of

the data community A cellular data card fits into the PCMCIA slot on a personal computer. It has a short lead which connects it to a cellular telephone handset to provide wire-free data communications from a mobile computer. A data card performs a similar function to a traditional modem, allowing the business traveller to send and receive electronic ma<u>il</u> and faxes, connect to his or her corporate network, use public servers and databases and access all the resources of the Internet. -

Mobile computer users can do this wherever and whenever they want to, free of telephone sockets. Because hotel telephone surcharges are so high, the mobile is often a cheaper alternative to using telephone sockets in a hotel room - and solves the problem of incompatible modern leads.

Adoption of cellular data services is likely to be speeded up by the availability of new lightweight computer terminals for executives who do not want to have to carry a bulky notebook computer about just to keep in touch with their e-mail.

The arrival of the mythical mass market personal digital assistant is still awaited, but in the meantime Hewlett Packard has announced the HP OmniGo 700LX Communicator Plus. This Integrates the HP 200LX paintop PC with a Nokia data card.

The Psion Series 3a will connect through a special combined battery and data card attached to the handset to give short messages, and e-mail is coming shortly. In future, an infra-red connection will replace the cable and allow the data card to be carried in the handset, allowing lower voltages to be used in hand-held

Nokia has approached the problem from the opposite direction, by announcing its 9000 Communicator, which adds a personal organiser to a handset. The casing opens out to reveal a small screen and

GSM, used extensively in western Europe, is spreading to other parts of the world

keyboard. Very importantly, both the 9000 Communicator and OmniGo 700LX will link to a PC to allow users to transfer their data.

"Products like the Nokia 9000 will take us into a whole new world of mobile communications," says Mr Nick French. PA Consulting's global head of mobile communications. "It means that as long as I am in a GSM coverage area, I can communicate data from the phone without taking a PC. We will see more examples of this type of product to support data ser-

"From the service providers" perspective," he continues, "they should stop providing huge subsidies to the man in the street for his wife to make the occasional telephone call while shopping. Instead, they should subsidise the costs of these appliances and their associated data services. The usage is much greater and they

could generate more call time. It is a benefit to the user to get data remotely to increase productivity, the operator makes more money, and everybody

Global System for Mobile Communications ("GSM") is an international digital cellular radio standard which is used extensively in western Europe and is spreading to other parts of the world, being adopted by systems in more than 100 countries in total. However, the US and Japan are using several different standards and even their GSM systems are not always implemented in compatible ways. In Europe, PCN standards, such as Orange and Mercury One-2-One, are being implemented which are not

In an increasingly global business environment, this means that the data service may not yet be available in important areas to which the user travels. Roaming agreements only work between systems using the same standard, so the solution is that manufacturers will produce terminals with multiple nodes built in, capable of supporting each of the main systems.

compatible with GSM.

"The US imposed an analogue standard, built a good system and exported the technology, but they have opened up their frequency to any digital technology," explains Mr Martin Garner, managing consultant for mobile communications at Ovum, the research analysts. "Standards give economies of scale for handsets and network equipment, so the manufacturers are happy to invest. Europe has learned the esson and is standardising on GSM, just as the US is unlearning its lesson by creating uncertainty for manufactur-

Data services provided by GSM systems can offer high performance with exceptionally few errors, but only at rates up to 9,600 bits per second. Higher rates are available with compression and slow-

strated over GSM. This rate, which compares with the 28,800 rate of the latest modems, will be noticeably slower than users have come to expect from their home and

office connections. The constraint is the network, not the data card, so the solution to this will be to use several connections at the same time, known as "multis- 🧳 lot." s many as seven connec-tions can be used and Nokia has demonstrated data transfer at 28,800 using three connections. "The network providers are still two years away from offering this facility, but they will get there," says Mr Mark

There is still a problem of where to get expert support for older machines

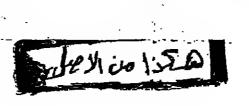
Squires, manager of cellular data for Nokia, the world

leader in data cards. "The networks are still polishing their data services, but they will get more aggressive for the business user," says Mr Squires.

"Growth so far has been faster than expected, because Windows 95 'plug and play' has helped to move the technology from early adopters to the average executive user."

However, Mr Garner warns that there is still a problem of where to get expert support for older machines, because cellular retailers have little computer expertise.

Data services have only been available for about 12 months and are still immature. Nevertheless, their use is spreading rapidly and, with more attention to speed and international coverage, they have the potential to become an essential business tool for all.



ON THE THRESHOLD OF THE NEW MILLENNIUM

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IT is key to economic success

PC-maker Acer is the eighth-largest computer brand in the world, employing 25,000 staff at 50 sites

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around the globe aiwan's blue chipweighted stock index posted its biggest oneday gain in two years at the beginning of April, triggered by news that Wall Street investment firm Morgan Stanley might be about to follow es and place Taiwan's

index on its worldwide Indices.

Chinese military manoeuvres put Taiwan in the headlines, where it can weather the threat of war.

staff at 50 sites around the

The US - By Malcolm Wheatley Superior results for democracy

PeopleSoft, which markets a range of client-server enterprise applications, is listed as one of the fastest-growing

n the leafy California sub-urb of Pleasanton, a busi-ness park that was constructed in more prosperous times by downsizing telecommunications giant AT&T now has pienty of vacant space. Appropriately enough, a fair proportion of this space now ouses the headquarters of the rapidly upsizing PeopleSoft

Listed by Fortune as one of the fastest growing companies in the US in 1994 and 1995, the nine-year-old company markets a range of client-server enterprise applications that is rapidly gaining it a big slice of the market. UK customers include Abbey National, Christian Salvesen, KPMG Peat Marwick, UK accountants, and

the Department of Transport. PeopleSoft represents a per-sonal crusade by Mr Dave Duf-field, its president and chief executive officer, to create the



Dave Duffield: 'Happy and productive people are the essent

he feels best suits software companies - if not the corporate world in general. Mr Duffield, a 30-year vet-

eran of the California software industry, vowed when setting up PeopleSoft that he would avoid all the mistakes that he had seen in other companies. Too many companies have too many people that have lost sight of the mission," he says, recalling bitter internal battles and corporate politicking. "We didn't want fieldoms to get in the way of serving customers."

The PeopleSoft proposition to its prospective employees is simply stated. They are expected to work hard, be focused on their customers, and be prepared to embrace change – the latter because, in Mr Duffield's words, "things are going to be different. That's a certainty."

In return, employees get an environment in which "it's fun to work," and an assurance that everyone around them will respect them and in turn be the sort of people that they

can respect "Nine-to-five people get drummed out. Bossy people get jumped on or drummed out. People who play kissy face with the people above them and dump on the people below them get drummed out," sums up Mr Duffield. "Happy and productive people are the essence of any success-

ful business." The company's annual report lists the name of every employee, and is illustrated with photographs of many of them - as are the walls of the office building.

PeopleSoft's employees are empowered, in Mr Duffield's for the first time, PeopleSoft's words, "to do whatever it one-person-one-office rule is to takes to keep costomers satisfied." Even if the ethos is not stated as such, the spirit of the organisation appears very much to be: "Sort out the

coming just after menacing proves that Taiwan's economy has developed to the stage

IT supply is a backbone of this economic success. Taiwan now produces 80 per cent of the world's computer keyboards. Half of all PC monitors are made in Taiwan. Acer, the \$3bn PC maker founded by Mr Stan Shih of Talwan is now the eighth-largest computer brand in the world, employing 25,000

The Talwanese government

problem first and ask approval later." This would be risible

were the results not so demon-

strable. Any office wall space not devoted to photographs carries gushing letters of thanks from the company's 600 corporate customers - 25 per cent of the Portune 500 at the latest count. Mr Duffield points out that companies in the US he runs the company in this way not because of some deep-seated belief in industrial democracy, but because he

believes that it will produce superior business results. PeopleSoft was founded in 1987 to create client-server and human resource management software - which at that time were both much riskier areas than they are now. Mr Duffield apparently liked what he had seen of Microsoft's Windows 1.0 and 2.0, and spotted a growing niche in Win-dows-based client-server enterprise applications - "although I never expected it to grow

Perhaps understandably at the time, his colleagues in his previous company did not share his vision, so he left to set up PeopleSoft.

this big."

Although the company now has a range of integrated applications that includes accounting, manufacturing and distribution functions. "human resource software was what I knew, so that was where we started," says Mr

The added importance given to human resource management within business generally since then has undoubt edly helped, and PeopleSoft's peckage has slavishly followed management trends such as competence-based development", flexible benefits and flatter organisations.

An interesting facet of the business is the extent to which the company's software development is user-driven. Mr Duffield concedes that the years he spent on the road selling software have coloured his opinions regarding the importhis area as well as in their expectations of service.

Every year, each corporate user is given a number of votes - known as PeopleDollars - according to the number of software licences they have. Companies such as AT&T. Hewlett-Packard and Siemens have standardised on People-Soft globally, and so have mul-

tiple licences.

Priorities for proposed enhancements are based on the PeopleDollar votes that each enhancement receives. Customer support and field sales personnel have a similar voting arrangement, and the results are then ranked to construct the development pro-

Mr Duffield professes to subscribe to a management theory that reckons that companies can focus on either product innovation, customer service or operational excellence - but that focusing on more than one of these at once is extremely difficult. PeopleSoft, he claims, manages to achieve the first two, but he has no delusions about the company's ability in the third area: financial controls apparently leave

him cold. "We're strictly seat-of-thepants," he says - perhaps unusually for the chief of a \$230m business. "We don't do the budgeting and nickel-anddime stuff very well. I don't care about that stuff at all, but if I hear that a customer has difficulties with our product, then I worry about that a lot."

One consequence has already become apparent. Despite a move to new premises, employee growth continues to outstrip available space: PeopleSoft is expanding faster than AT&T is contracting. So. be broken with a move to cubicles to make better use of the available space. Characteristically, Mr Duffield is moving into the first one himself.

cap provide a powerful economic stimulus, it is a terrifically competitive sector.

Tom Lin, a 66-year-old former air force engineering officer is now 23 years into his second career - promoting Taiwanese products as deputy secretary-general of Cetra, the island's external trade council. Fresh from the rigours of Cebit, Hanover's notoriously wearisome IT fair. Mr Lin puts a humorous gloss on his challenging role: "I'm a 'made in Taiwan' ambassador, but I have to develop a message that Taiwan is not a shirtmaker."

The phenomenal output of

Taiwan's electropics sector and

the rise to world prominence of

Acer should have established that fact a long time ago But Mr Lin knows that his home-land is coming to the market in the wake of Japan's success. Taiwan's dilemma is twofold. It supplies huge volumes of the IT industry's componeats, but the buried nature of items such as computer net-

cent of these are made in The second dilemma is quality. How can Mr Lin and his colleagues convince the outside world that their country is

not a bargain basement site

work cards means that few

people know or care that 40 per

match Japanese specifications? Mr lan is frank about the way Taiwan entered the IT market: through contract component manufacture rather

than innovation. "In the past, Taiwan was the king of original equipment manufacture. But we learned a lot from this kind of work." Now the imaginative edge is

returning, claims Mr Lin. In the world of the Asian Tiger economics, Taiwan occupies a position between Malaysia, with low labour costs, and Japan, where the brainpower needed to fuel an IT industry is more expensive to recruit. But Tajwan's mature innovators are flocking home after lucra-

"Thirty years ago the braindrain was to the US; our best people chased jobs in companies like IBM. Now these middle-aged engineers are coming hack to Taiwan," says Mr Lin who christens this trend a "brain-gain". He says 5,000 such IT professionals have recently returned to their place of birth to boost the island's industry, typically setting up small high-tech companies of their own.

Taiwan is fighting its down-

tive careers in the US.

market image through a scheme intended to reward pipeline quality and innovation. The

turning out goods that do not National Award of Excellence grants manufacturers the right to use a national symbol of excellence on their goods. The Gold NAE certificate is worth £35,000 to Winners; companies getting the silver award receive £16,000.

These are hardly sums to set corporate hearts beating, but a lot of organisations qualify awards. In the most recent round, 216 companies won an award, out of a field of 600.

Mr Lin is quick to point out that some judges are drawn from beyond Taiwan. Recent products that caught the judging panel's eyes included an Acer notebook and a computer mouse with function buttons on its sides.

Cetra works at 700 employ ees hard. "We have 25 trade shows in Taiwan and we attend 80 all over the world," says Mr Lin. A high proportion of these are in the IT sector. Beyond the component sup

ally contracts and the NAE symbols, does all this effort pay off? Taiwan's Plustek has just launched the world's smallest page scanner, a £99 product the size of a one-little juice pack called the Page Reader 800. Mr Lin is convinced that a flood of groundbreaking products are in the

"When I joined Cetra, very



Tom Lin: he says 5,000 IT professionals recently returned to Taiwan

few people in Taiwan knew what international trade was, We took them overseas and showed them how to do business. Now we have the internet and companies can get information from our own

home page.

Mr Lin is visibly proud of his nation's fledgling democracy. He compares the current debate about the internet and

its uses with Taiwan's move towards its first presidential election. There are no restrictions on Web usage in Taipei. "You can send an e-mail to

President Lee. It was this presidential election that provoked a show of force by mainland China, But Mr Lee points out that many large Taiwanese companies maintain plants in China.

For Taiwanese IT specialists, Japan remains the big question. In 1995. Taiwan had a \$17hn trade deficit with Japan, importing \$30bn worth of goods and exporting \$13bn of

its own products. Like any merchant adventurers. Mr Lin and his Cetra colleague Mr Bret Lee travel with a range of gadgets intended to impress overseas audiences. A pocket dictation machine that exploits microchip technology to dispense with a tape is the

work of Taiwan's Sidex. "We can improve technology and apply that advance in a way that is affordable in the market," Mr Lin declares, brandishing the Sidex machine. And his efforts are paying off.

In Taipei, First International Computer is attempting to emulate Acer's achievement, producing more than 100,000 desktop and notebook PCs a month. FIC is looking at a delivery channel that allows central processing units to be installed in the country of delivery so local agents can offer the very latest release of technology within the company's kit.

The Taiwanese government noted the failure of Japan to follow hardware success with software developments and targeted software as the island's next designated growth area.

A small island accustomed to

shrugging off bullish behavlour from powerful neighbours clearly has a lot to offer the IT



Rumble of discontent from clients

The report found that one-third of organisations rated the problems of outsourcing as outweighing the benefits

A Consulting has picked up a rumble of discontent from customers in tis third annual survey of outsourcing, due to be published later this month.

"Even some big companies are starting to say we are not getting the attention we expected." said Mr John Little, one of the report's authors. "There is a limited amount of talent around and the explosive growth of outsourcing is spreading it more and more thinly across more and more

The report*, which surveyed attitudes and experiences in France, Germany, Denmark, Hong Kong, Australia, New Zealand, the UK and the US, found that one-third of organisations rated the problems of outsourcing as outweighing the benefits. And while twothirds perceived more benefits than drawbacks, the survey concludes that only 5 per cent of the organisations are achieving the level of benefits which are potentially available.

More than 1,000 directors and senior managers were inter-

Part of the mismatch between expectation and reality is caused by what Mr Little characterises as the "A Team-B Team syndrome", where the A team makes the sale and the B team does the work.

"The members of the supplier team who do the work on designing the solution and promoting this to the customer generally move on once the contract is signed. The implementation team rarely have the same enthusiasm for new approaches, or expensive new skills, particularly where these carry any risk to the supplier's financial performance," said Mr Little.

"While the sales team may (or may not) be acting in good faith, they do not have the operational clout to enforce the sold solution." By the same token, senior management attention on the customer side moves on once the contract is

The root of the problem lies with the nature of outsourcing contracts which, in general deal only with the delivery of services. "They fail to include any definition of the relationship - in other words how the customer and supplier will work together to ensure that the benefits are delivered." Customers are looking for

Prices are dropping

Enter the digital camera.

These new devices allow users

to shoot images directly and

store them on files within the

samers. The files can be traus-

ferred to a desktop computer

for use in desktop publishing

and image-editing applica-

One recent entrant to this

growing market is Japanese

electronics giant Casto – which

has launched two digital cam-

eras in the past six months.

The cheapest of these is the

QV-10, a hand-held digital still

camera that allows images to

thanks to a high-resolution active matrix L8-inch LCD col-

The images can be subse-

quently transferred to a per-

sonal computer using connec-

tion kits which will work with

both Microsoft Windows and

Apple Macintosh operating

systems. Images can also be

output to a video source such

cable. Connection kits and

a price of \$995 and made avail-

able at many computer outlets

and office super stores in the

US, enabling Casio to enter the

consumer, small office-home

office (Soho), vertical, and per-

sonal computer markets with

opportunities for the Casio

says Donnie Coffelt, Casio's US

vice-president of marketing.

and we look forward to bring-

ing colour digital imaging

technology to a whole new seg-

ment of the market. The OV-

10's built-in colour LCD high-

QV-10 LCD digital camera.

"There are a whole world of

something a little different.

cables come with the QV-10.

The camera was launch

as a TV or VCR, using a vi-

viewed as they are shot,

■ Digital photography - By Geoffrey Wheelwright

The picture files

a desktop

in desktop

can be transferred

computer for use

publishing and

image-editing

from the camera to

igital photography is suddenly becoming much more affordable.

A few years ago, you would

have had to pay as much as

\$20,000 for the honour of using

a digital camera, but prices for

the most recently-released dig-

ital cameras are dropping rap-

idly - with a wide range of choice for less than \$1,000.

These new hand-held digital

devices offer an easy way to

get pictures into your com-

puter without requiring the

use of a scanner, an outside

agent or any extra equipment

Traditionally, you would

photographic images

have to either obtain pre-

on a CD-Rom (by paying some-

one else to have their film pro-

cessed unto a Compact Disc.

using Kodak's PhotoCD sys-

tem) or buy an image scanner

the computer for editing and

Both processes have been

time-consuming, expensive

and frustrating - particularly

for users who only need to add

simple "work-a-day" photo-

graphs to their insurance

adjustment forms, real estate

sheets, product catalogues and

"photocopy" images into

er then what you :

you buy the camera).

John Little: There is a femiled

innovation and added value. and they expect suppliers to come up with ideas on how to achieve this throughout the

"Even if the supplier did have the skills and technology

ports for PCs-video devices,

and large image memory area are all in keeping with Casio's

philosophy of bringing afford-

able high-technology products

to consumers." Caslo says it

QV-10 to vertical markets such

as insurance and real-estate,

in addition to the large PC and

Meanwhile, Apple Compute

is still in the digital photogra-

phy business following the

lannch late last year of the

QuickTake 150 – a hand-held camera that looks like a cross

between a pair of binoculars

and a small spaceship. It

weighs slightly less than 1lb

and provides the ability to

store up to 32 "standard reso-

lution" pictures or 16 of "high

can be transferred to either

Apple Macintosh or IBM-com-

patible computers running

Microsoft Windows, then

placed in publishing or image-

editing packages. The camera

also uses standard rechargable

AA betteries, so users can buy

and use ordinary AA batteries

if they have not got time to

The camera holds its image

in computer memory while the

battery is changed so that

users do not lose any pictures

Some photojournalists and

newspapers have already

started using digital cameras

in the field. Like newspaper

are now able to send their

work as computer files via

"modems" over telephone

recharge between uses

they have already taken.

reporters, the photoic

Once again, these image files

sımer markets.

also intends to market the

it did not have enough to go round all its customers, and only those who had the foresight to make this a contractual obligation or were too big to ignore, actually got what they were buying - and then sometimes with a struggle." But whatever the problems,

there is clear evidence from the survey that outsourcing will continue to grow. "The move to outsourcing is not about fashion or political drivers. It is about a new way of doing business," said Mr Little. "There is unrelenting growth regardless of sector, and the trend is universal."

In the 1994-95 survey, 26 per cent of respondents said they would bring IT back in-house if they could, or that they wanted a divorce in order to re-marry' a different supplier But when surveyed for the 1995-96 report, none of these companies had made such a

While PA Consulting's two previous surveys showed that cost-cutting was the main motivation for outsourcing, companies now say that activities which are not part of their competitive positioning should be outsourced to suppliers who are "the best of breed" in each perticular activity.

"Obviously, people are not going to outsource if it costs them more, but they have started to look for other bene-



Outsourcing

More than 1,000 business lèaders took part in a recent survey

fits as well," said Mr Little. When asked to select three out of 11 statements which gave the best description of their organisation's view of outsourcing, 50 per cent said: 'We outsource when others can do it better", 35 per cent said: "We outsource to focus on our core business", and 32 per cent said: "We outsource to reduce our cost base." The bias to outsourcing for

tactical reasons is common to all the countries surveyed. One consequence of outsour cing for tactical reasons is that there is a trend away from

handing IT over to a single supplier, towards using multi-

Views of outsourcing

surce where others

to miscove productivity and

____ to gain competitive advented and Miles that the come too

because we are under political

___ to get rid of internal problems anything that is not core to

Source: PA Consulting

ple suppliers with expertise in particular technologies. "There is a recognition that the supplier which is best at supporting PCs is not the best at managing wide area networks or corporate servers."

This shift has raised a different problem: how to get suppliers to co-operate to deliver a new it allow enviro. While it was claimed that suppliers oversold their ability to contract or partner with other suppliers, many interviewees had to admit ruefully that they had not done their homework on establishing whether the mechanisms to do this were actually in place "'Two bottom lines inevitably means problems' was a common comment," said Mr Little

To overcome such difficulties, the smart companies are setting up overarching agreements which stipulate how the various suppliers must work together. "If the suppliers don't agree, they can't join the party".

This in turn is leading to significant increases in two more sophisticated kinds of business relationship. The first is a consortium of suppliers working together to fulfil a contract, the other is the joint venture between the supplier the cli-The survey found a common

view across countries and industry sectors that to obtain the full benefits of outsourcing there should be a shift from outsourcing on a country-bycountry basis to global outsourcing.

"This appears to be based on the expectation that supplier

ting the same CV from differ-

ent agencies, an issue which

has long upset contractors

because managers who receive

two identical CVs usually

The Independent Computer

Contractors group's support

includes encouraging its 350

members to use job agencies

which belong to the federation.

is also writing its own code of

practice, has launched a CV

faxing service for its members,

which again focuses on recruit-

ment agencies in the federa-

tion. Contractors can send

their CVs to the specialist group's administrator with a

list of agencies to contact, and

the document is passed on by

Mr Mike Cullen, the group's

chairman, says the service

ensures that reputable agen

cies are supported and saves

contractors the time of check-

ing which agencies are mem-

bers of the federation. Contrac-

tors can ruin their chances of

winning a job if they unwit-

tingly send their CV to a non-

The federation's most ambi-

tious project, now under dis-

cussion, involves reaching

agreement with employers on

Employers would have to

give contractors the chance to

gain experience in their new

skill, and contractors would

have to commit to working

their skills needs and arrang-

ing training for contractors.

member, he save.

In addition the group, which

throw both away.

capacity will grow in line with demand," said Mr Little. But, he points out, at the. moment there are very few suppliers capable of design and delivering service solu-tions on a consistent international basis.

Even among these, many have grown through acquisition, which is not a good guarantor of consistency of

approach. "The market for global outsourcing is currently too immature to deliver the levels of benefit which it should be possible to achieve through taking an organisation-wide view."

ernational Strategic Source ing Survey 1996. P.A. Consulting Group, 123 Buckingham Palace Road, London SW1W 9SR. 0171 730 9000

London symposium on the future of desktop send a CV to employers withcomputing out the applicant's permission. This prevents an employer get-

directors and senior person from the IT-user community will hear an impressive line-up of speakers taking part in Interforum 96 in London on Friday, June 7 when the them will be "The fature of the desktop – business strategies for the network-centric

computing era". Sir Peter Bonfield, chief executive of British Telecom and chairman of ICL, will deliver the opening keynoti address. The closing address at the televised event at the. Queen Elizabeth II Conference Centre, Westminster, will be given by Mr Lerry Ellison. chief executive and preside of Oracle, the poftwere

company. Interforma 96 marks the launch of an annual IT postum by UniForum in association with the Financial Times, UniForum is a non-profit organisation with more than 1.200 members spanning the vendor, user and central government

The one-day event will also address an international audience via the FT Television wice which is available to TV stations worldwide.

Other speakers will include: Mr irving Wladawsky-Berger, head of IBM's Internet Division, Mr Philip White chief executive and president of Informix Software, Mr Keith Todd, chief executive of ICL, Mr Javaid Aziz, European vice-president of Silicon Graphics, Mr Gene Ramman general manager of Deskton Systems Group, Sun Wicrosystems, and Mr Peter Martin, editor of the international edition of the FT. Speakers' views will also be available on the Internet

via the FT Web site. ☐ For more details of the event, contact Mr Philip Flaxton, executive director UniForum UK, 9-11 KBC House, Richmond Station Buildings, Kew Road, Richmond, Surrey TW9 2NA tel (+44) 181 382 0446, faxback (+44) 181 332 0448.

☐ The FT-IT Review in June will also examine busines strategies for the network-centric computing



life of the contract. "Many of the interviewees reported that one of the most convincing arguments in the outsourcing sales pitch was: We have better ways of doing things: we have the skills: we have the technology," said Mr Little. The reality proved somewhat different

People and skills: IT contract staffing - By John Kavanagh Reputation had to change

Unlike the 1980s, the mid-1990s are seeing determined efforts to establish standards and bring order

to the market The recession and subsequent recovery are proving to be among the best things that could have happened in IT contract staffing. not only for the surviving agencies and contractors but also for IT managers desperate

to fill skills gaps.
The 1980s and then the recession saw companies shifting emphasis increasingly from permanent to contract staff but at the same time brought in small agencies keen to make a fast buck. This tarnished the already less-than-perfect image of the busin

The early 1990s brought a market shake-out and growing demands from customers for higher standards as they that their future would lie more and more with contract

These developments are now leading to important change, with leading agencies, their staff and individual contractors seeking not only to set professional standards but also to work with customers on new ideas in areas such as training, forward planning and Such developments are

important in the light of trends towards contracting. Research by recruitment group Delphi shows that almost two-thirds of IT departments use contractors. A fifth of the rest expect to turn to contractors in the next two years, while almost 60 per cent of existing users will use them more.

These findings are reflected in the take-off of contractors pay in the past 18 months. Recognitions firms CSS Trident and Software Personnel say rates rose by just over 5 per cent in the 12 months to June 1995, including a 3 per cent increase between January and Jume. The pace increased further in the second half, taking the average increase to 11.6 per cent for the whole of last year. However, unlike the 1980s. the mid-1990s are seeing deter-mined efforts to establish sinn-



dards and bring order to the market. The Institute of Employment Consultants, representing indi-

viduals working in job agencies, has been promoting itself hard in the IT market. The institute has a code of practice and courses and examinations leading to its own qualifications. It has run a big promotion campaign in the past 18 months, with initiatives on age discrimination and the employment of disabled people. Membership has increased by a fifth to 3,500 and training income has grown eight-fold.

It has just launched an advertising campaign which tells employers and job hunters to favour agencies with staff who are institute members. The campaign is part of an attempt to improve stan-

Mrs Julia Robertson, the chief executive, says changes last year to the legislation governing job agencies have focused attention on professional conduct. "Agencies are ensuring that their staff are better trained and more aware of their legal and professional obligations to candidates and employers," she

"Our new campaign will not only help people find quality service but will also have impact on recruitment staff who are not yet members." Her views are supported by recent block membership applications from some agencies, including the UK's biggest recruitment group, Reed Personnel Services, which says it is underlining its commitment to quality by paying the membership subscriptions for its

600 consultants. Agencies, too, are working on the industry's image, some with their own standards schemes. CSS Trident has launched its own Certified Software Specialist scheme, with a code of conduct. Software Personnel has drawn up separate client and contractor charters covering its own behaviour towards them.

At the same time, a handful of agencies have achieved the ISO 9000 quality management standard in the past two years and a couple have gained the Investors in People award. The main activity at agency

level is in the Computing Division of the Federation of Recruitment and Employment Services, which has established a code of conduct that companies must agree to before they can join. About 100 IT agencie have signed, out of an estimated 800-1,000 in the market. The federation is getting

valuable endorsement from the Independent Computer Contractors Specialist Group of the IT industry's main profe body, the British Computer Society. This is partly for practical reasons: the federation's

by Independent Exhibitions. The Finance IT Summit is organised by Indisive Research - Tet: 0171 288 1888

mainly through certain agen One proposal is that federation members could share training costs in exchange for guarantees that the contractors would only work through these agencies. The training would be based on employers' needs, so in return these employers would have to be prepared to give contractors the chance to use their new

Contractors might have to agree to give priority to the encies that were supporting them in their training The plans are still in their

early days but all these developments of the past two or three years reflect the industry's acknowledgement that its reputation from the 1980s has



Document Management. The Internet, Electronic Banking, Roal-time Settlement, Networking., p. 7

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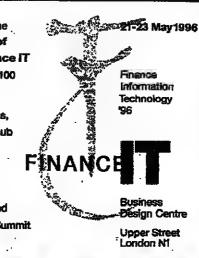
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Microsoft

Learning to live together

Some analysts are predicting that CTI and other sophisticated call management techniques will be among the main drivers of computer sales by 1999

he digital worlds of telephony and computing are on a collision course which promises to transform business communications and redefine the relationship between traditional telecommunication equipment vendors, computer and networking groups and software special-

Computer Telephony Integration (CTI), although still in its infancy, is a rapidly expand-ing market which is already generating innovative business applications and helping companies to improve customer responsiveness, productivity

and efficiency. "CTI is really the marriage of computing and telephony, and companies from both sides are offering products," says Mr Philip Armstrong of Northern Business Information, a division of Datapro. He estimates that the market for CTI was worth \$2bn last year and will grow to between \$10bn and \$12bn by the end of the decade.

As telecommunications converges with computer systems,

Directions

Computer Telephony integration (CTI) promises to transform business communications.

communications servers in a client-server network are evaporating. Coupled with a move away from proprietary systems and towards open standards, this has ignited the interest of both applications developers and potential users in CTL

By the end of the decade

some analysts are predicting that CTI - particularly desktop CTI - and other sophisticated call management techniques such as Interactive Voice Response, will be among the main drivers of computer sales. Traditionally, CTI has mainly been identified with call centres and mostly confined to large companies such as financial institutions, utilities, retail and travel organisations which have needed to handle a high volume of

incoming calls. According to BT, there are 25,000 call centres in the US users and these are almost exclusively call centre operators, however this is expected to explode by the year 2000. By this time, BT predicts that call centres will represent only about 12 per cent of the UK market in CTI as more and more use of CTI is made for office automation and personal

productivity. "CTI is the next logical step for call centres," says Mr Chris Ellis, marketing manager for **GPT Communications Systems** in the UK, who estimates that up to 60 per cent of Cff sales today relate to call centres.

Most call centre users graduated from Automatic Call Distribution (ACD) telephone systems which have been around for about 30 years and which route calls to an appropriate operator or "agent". CTI systems go one step further by using information gathered about a caller, such as their Calling Line Identification-derived telephone number or an account number entered using a touch tone telephone, to link to a customer databas

Information about the caller can then be sent to an agent's computer screen - sometimes before the caller is even connected - using a technique called "screen popping".

Employing CII in call centres can improve customer service while cutting costs and improving productivity. "CII which enables 'screen popping' is already becoming a key differentiate to ensure customer loyalty in today's highly com-

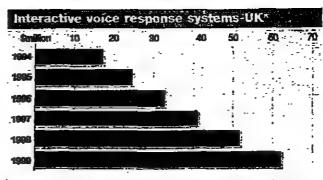
with 500,000 operators. In the petitive market place, where UE, there are just 17,000 CPI the whole concept of telebusinesa is being reviewed across all industry sectors," siys Mr Gordon Loader, UK marketing manger for Aspect Telesommunications, a leading AD ven-

> CTI can also be used to help manage outgoing cals and optimise a telesales oferation using a technique caled predictive dialling which attornatically calls customers or prospective customers using a database and statistial algorithms to reduce the isk that there will be no fre agents available to deal with a successfully connected cal.

"At the heart of an predictive dialling solution i its pecing algorithm," says & Robert Schwartz, director of European sales for EIS interational "This algorithm monites and controls many variable in the call centre, such as theornect rate, average call lenth and customer wait time."

These systems can dierentiate between no aswer, engaged signals, answering chines and a humar voice and connect real peope to a free agent within a seemd of establishing the conection while also transmittin relevant customer details o the telesales agent's screen.

Other CTI applications include audiotext servicesuch as weather or traffic forcasts and fax-back services here callers can use a toucitone telephone to request infimation which is then sent bak to them via a computer-general

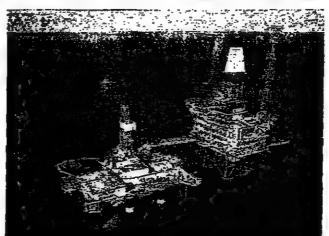


Another fast-growing group of CTI products, sometimes called intelligent office systems, are aimed at departmental or work group applications where they help support teleworking, "hot-desking" or simply ensure that customers dialling a single number reach the right employee no matter

where they are. These segments of the market have been dominated by the big telecommunications developers to write CTI appli-

and computer equipment vendors and independent specialists. However, the potential of CTI to transform the workplace has recently attracted the attentions of others including software groups such as Microsoft and Novell Microsoft in particular sees desktop CTI as a personal productivity tool to be integrated into both home and office.

Microsoft is encouraging



C3 of Cambridge has installed an emergency mobilisation system in the North Sea for Total Oil Marine. The system uses Dialogic computer

cations using the Telepho are lots of factions in the mar-Applications Programmi. ket with different agendas and Interface (Tapi) specificatic that results in lots of flux in developed with Intel, which defacto standards."

built into its Windows 95 open In an effort to address these ating system. Meanwhile, tissues, some of the largest suphas launched Microsoft Phonepliers in the business have a desktop CTI productioned forces to create the designed to work with prod-interprise Computer Teleucts such as the Creative Labs hony Forum (ECTF). plug-in Phone Blaster tele- Others, including IBM.

phone management system. pple, ATT and Siemens, have By using APIs, independent rmed a consortium called application developers such as wrait which has already London-based Virtual Office ued specifications for the Company argue that "the Port, a high-speed wired power of the PABX, previously unection for computers, hidden away in the basement, Dile devices and telephones can now be delivered to the az CTI "encyclopedia" specdesktop through the PC which is known and understood to the users. This way, the invest-

made in telephony can finally deliver very significant productivity and customer service Most analysts believe the increasing power and flexibility of computing products will ean that they will continue varis international stanto eat into the traditional husiness of the telecommunications equipment vendors.

begun to respond. Although there are no PCbased PBXs on the market today, Mitel has recently announced the development of its MediaPath open processing platform and collaborations with several computer vendors including Digital Equipment. Meanwhile, the entry of Microsoft with Tapi and Novell with a rival specification called Tsapi (telephony services appli-cation interface) into the CTI market has added to the exist-

Some, like Mitel, have already.

ment which organisations have

Mr Keith Clarke, a consultant with CMG, the computer services group, notes: "There

ing confusion over standards

and interoperability.

sonal Data Interchange and

gether, Versit and ECTF we to keep CTI "open" so theustomers can mix hardwaand software platforms on 3 desktop, on server and marame systems. Their idea is tork together to allow the devement of multi-vendor CIT plications, based on the

Sugnitiatives could have a consitable impact on CTI as the riket begins to mature. As Michann Edward, European pluct manager for Data Genera call centre products, notes: Vith its productivity. efficien and customer service benefits II is certain to have a drawe impact on the way business interface with their costome

The ovenience and userpreferen for the telephone will, hower, ensure its survival as sessential communication toxfor the foreseeable future. Imorder to maximise effectivens of customer services: whil providing a sufficiently psonal service, the telephone d CTI must then learn to livtogether."

APPLICATIONS | Rod Newing locks at innovations by Novell and Lotus

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Global networks are new business model

have success to every busine and consumer in the world and have hilling arrangements in place with them. By working with telephone companies we can offer more services and charge for them using their central billing." This is Novell's vision of the future, as outlined by Mr Lalit Nathwani, their senior brand

IT companies, such as Lotus and Novell, are busy building elobal networks in partnership with telephone companies. This represents a new business model for the industry and is consistent with the current vision of network computing as the fature of the industry. Users access the Novell and Lotus

networks through their local telephone company. There will no longer be a

need for the wide area network or even a local area network. Documents, databases, applications and Java applets can be stored on public servers provided by the telephone company, such as those provided by BT in partnership with Hewlett

Packard. In the case of Novel, response and continuous evailability. bill the user for all charges incurred while connected to the system. This will cover the

normal communications charges for compection, as as charges for using the value-added service which the network itself provides, such as a global directory, secure

The bill can also include charges for use of software and applications on the network servers. These may be either public servers or any private server attached to the network by an organisation, including the 3m NetWare servers already in existence. This could include the use of

pplications, Java applets or ther objects, and information svices and goods purchased er the system. This provides a secure maged alternative to the ernet, with a global ciery to bein neers find the Brmation, services and Mets they need," says Mr Newsni. The infrastructure win underlies the Novell neork is provided by Ne are and Group Wise, so

is a commercial secret, but is probably 1 or 2 per cent. Because of UK legislation

BT will provide separate billing for communication charges and Notes system usage," says Mr James Hogbin, product manager, BT Network for Lotus Notes. "We provide flexible billing systems, but it is up to the client to select the mathed. There is no convent revenue sharing with Loins, but when electronic commerce starts happening there will need to be a review, but it is a year down the line. When we do, we would expect a partnership, just as we have with

Hewlett-Packard." Ms Margaret Cekada marketing director for AT&T's Novell service, says: "This new model provides a wide area network for novices and of the future." If users are prepared to pay a little more for a secure, robust, managed



An actist's impression of RAF Tornedos firing Airlineis mi Hughes (UK) chose ST Network for Lotus Notes to link its 1 Team AltHawk business partners throughout the UK in their bid fig

alternative to the Internet. they will pay the telephone company and will never know how much goes to the IT

If they get this right, users will gain – and it could be a licence for Novell and Lotus to print money!

D Pollowing our repet in the April issue of the FIIT Review on virus protection, bus Development would lise to point out that the Green Stipe virus was not circulated wit Lotus software. Lotus has stingent of its software package.

per tage of the billines

Buies. The exact amount

mathy the telephone

Police test neighbourhood links

Voice Beaging often seems to the Beral public to be the macceple face of

nforman techn Wherein the old days you could tal_{o a receptionist or} secretaryd get a straight answer, b a computer

dands in 17 way. But it d not have to be so. Properly Ried, voice mail CAIL CASE Commications. British pol forces are dopting it help them work more efficien with the public to begine. Staffordsb Police, for

example, barecently installed a sun from the US company Octo communicate+h neighbourhowatch chemes. The ten is being tested with w co-ordinators be Leek and

Tamworte me-It will call the antomatically he time of day when they le said they should be avails and will keep calling untopiact is

When the phon d, the syn will introduce itself ausk for a PIN number (pers) identification nut) to be input before it givhe latest local information Superintendent I Lovell says: "This is a full

automated system, ch is something quite notor the police. It should not y save a lot of time in contag people but also ensurat the same message is deli-d to EVELYONS.

"In the past, messagave been passed from one som to another and have bue embellished in the pro-

If the experiment is necessful, he hopes to and the system to cover ent. warnings of trouble, sus hoplifting gangs or fool

call-out for key individuals to attend important incidents. Staffordshire Police first

installed its voice messaging system on trial in 1992 with 150 mailboxes. When this proved very popular, an enlarged system was installed in 1994 connecting 28 police

The move to bring in the neighbourhood watch schemes began in March. Other police forces are watching the Staffordshire seriment closely and some have already embarked on the

same route.

Northumbria police have also begun contacting neighbourhood watches voice messaging system. Superintendent Dennis Mitford, who was in charge of the contact people once a week is a huge task and anyway the information is out of date by that time."

So last year Northumbria Police upgraded its Octel internal voice mail system to handle communications with neighbourhood watches. A pilot scheme showed very sitive results, in delivering information to contacts more quickly and in saving time for officers, according to Supt Mittord.

"It has been a success so far, but it is still early days," he says. "The system copes very well with 50 people, but I am not sure that it will be able to cope with expansion to 1,500 or 2.000."

He would like to be able to encompass hotel watch and

technology proves resilient. Voice messaging may have other advantages for the police. Answerphones have been found to be inflexible

because they cannot give out complex information, cannot cope with receiving long messages and cannot forward With voice messaging, many calls for information from the public can be answered

automatically. Officers in remote stations can check their voice mail boxes for briefings instead of having to call a duty sergeant or travel to beadquarters. The media can call to listen

to the latest news. Members of the public can leave "tips".

Microsoft

George Black

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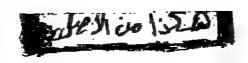
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Computer Telephony Integration

■ The background - By Geoffrey Wheelwright

An idea revisited

With 'Microsoft Phone' software. the PC is being extended into the world of voice-based telephone communications

The idea of marrying computer and telephone technology to produce a hybrid computer-phone is not

It was tried as early as the mid-1980s with the development of the now-forgotten "One Per Desk" from British Telecom-ICL - a system also known as the BT Tonto - and the American TeleCompaq, one of the few failures born out of US computer giant, Compaq. But Microsoft, the personal computer software market leader, has decided to revisit the idea with new software that recognises the fact that computer manufacturers are

functions in their computer systems. Computer-makers Apple. Compaq and Packard Bell have all produced systems in the

communication

not going to put

the telephone

of business

companies out

over the Internet is

overnight, however

tion for Internet Phone

declares. The software, one of

more than a dozen software

programs that has been intro-

duced in recent months.

enables Internet users to speak

os Angeles to Tokyo is

now a local call," the

World Wids Web promo-

Voice

once again building telephony

past two years that include features such as fax send-and-receive capabilities, telephone answering machine and speakerphone capabilities.

"Microsoft Phone" software aims to bring some standardisation to the integration of telephony functions in computers. Microsoft points out that leading hardware manufacturers are now producing voice modems and complete PC systems that provide innovative computer-telephony applications based on the new prod-

The company says Microsoft Phone is a software-only speakerphone and answering machine made possible by new communications technologies available only in the Microsoft Windows 95 operating system, and by new, voice-enabled modems.

Manufacturers offering Microsoft Phone products and systems include Creative Labs. Diamond Multimedia Systems Micron Electronics and Miro Computer Products.

"Computers are already essential in fax and datamodem communications. Now, with Microsoft Phone, Microsoft is extending the PC into the world of voice-based tele-

■ Voice and video on the Internet - By Louise Kahoe in San Francisco

up" access to the Internet,

because calls can only be

Another drawback is that

there are, as yet, few standards

in this emerging field. Differ-

ent programs use various sig-

nal compression schemes and

connection protocols. Thus,

both parties to a call must be

using the same software, or

programs that employ the same compression and connec-

tion methods, in order to com-

Another difficulty arises for

users with "dial-up" access to

the Internet, including most

home computer users. In order

to link two computers via the

Internet, it is necessary to

municate.

placed at pre-arranged times.

It's good to talk for nothing

uses speech-recognition technology that enables users to store frequently-used numbers in memory and to dial merely by saying a name.

phone communications," says

PCs into speakerphones; store

Manufacturers

suggest it will

access to new

all electronic-mail, voice and

box"; let callers hear

messages or receive faxes by

use text-to-speech technology

to read electronic-mail

messages aloud over the

most people agree that a CD provides sound quality supe-

rior to that of a vinyl record. In

practice, however, the sound

quality of Internet phone calls

To match the sound quality

of a standard phone call, about

8 kbytes of data must be trans-

mitted per second. Most PCs.

however, are equipped with

modems that transmit and

receive data at much slower

speeds. In practice, a 28.8k

modem is needed to achieve

To compensate for slow

ion algorithms, called

modem speeds, internet phone

software incorporates data

reasonable sound quality.

varies significantly.

In addition, Microsoft Phone

leave

give them

markets

announcements.

systems division.

Mr Brad Chose, general man-ager of Microsoft's personal The company also says that the software will let users set up password-protected voice "The rich communications mailboxes for remote collection of messages. In addition, technologies in Windows 95 combined with the product Microsoft says you can tell the computer to notify you offerings of our hardware and OEM partners result in a powautomatically when new erful and integrated computermessages arrive via pager, telephous experience for endmobile telephone (or any other telephone number where you Microsoft Phone apparently might be contactable). Newer allows users to create centraltelephone services such as ised message centres that turn caller-identification and call-forwarding can also be

accessed from the software. Hardware manufacturers seem enthusiastic and suggest that it will give them access to new markets.

"Our new multimedia systems incorporating Microsoft Phone give individuals and small businesses the ability to manage their telephone and messaging needs in a way that's only been available to large corporations until now," says Mr Kenneth Birch. vice-president of strategic

"The new communications technologies available together for the first time in Windows were crucial to making this

in which only one person can speak at a time, an effect remi-

niscent of CB radio communi-

For all of the limitations,

however, internet phone soft-

ware is rapidly improving and

for many PC users it is a great

benefit, enabling frequent con-

versations with distant family

members, friends or business

colleagues, without incurring

Among the dozen or more

available. WebTalk from Quar-

terdeck Software is receiving

positive reviews. The program

provides good sound quality

and a wide variety of audio set-

tings as well as directory assis-

tance. It costs \$50, (http:// www.odeck.com). WebPhone.

from NetSpeak, a Florida soft-

ware developer, is one of the newest pieces of Internet phone software. Launched in March, WebPhone, and a com-

panion product called Business WebPhone System aimed at business users, provide full have an attractive cellphonestyle user interface. A free trial

version of WebPhone can be

downloaded from the compa-

ny's Web page (http://www.netspeak.com). The retail version

high telephone costs.



nal Express sales via telessies and booking staff have grown by 55 per cent

CASE STUDY

National Express coaches

Smart system helps sales

It is becoming more and more unlikely that you will initially hear a live, human, voice when you call the service department of any big corporation. Increasingly, call management systems are being used to take the load off human operators and more accurately direct calls to where they are supposed to

Aiding this trend is the parallel development of omputer telephony Integration (CIT) systems. which harness computing power to assist with call magement and automatic call distribution. A good example of how all these trends come together

can be found at the information technology department of the National Express couch group. National Express recently started re-cogineering its

integrated booking service

with technology using Microsoft Windows-based personal computers from Olivetti UK and is now claiming cost savings of abo £13,000 a month while increasing the volume of calls

According to Mr Chris Brown, director of information technology for the National Express coaches telesales centre, the new system (dubbed Smart) bas helped sales via its telesales and booking staff grow by 55 per cent.

He also says the average cost of each sale has fallen as staff have been able to do a better job of "cross-selling" additional services while taking sales calls. The company says that prior to the installation of the new system, the sales stall payroll was equal to 22 per cent of revenue from sales. That figure has now apparently

dropped to 17 per cent in the first four months of using the system.

average between 7,000 and 10,000 per day, as well as increasing the number we are able to convert into confirmed sales." Mr Brown says. Meanwhile, there is an effort under way by a group of US companies (Apple, IBM and AT&T's Lucent) working with German computer and bring about greater

electronics giant Slemens, to standardisation to the whole computer telephony area. These companies have banded together to launch an initiative called Versit, which is designed to get system designers and manufacture to create systems that conform to certain standards. At the recent CeBIT annual

group unveiled the Versit CTI Encyclopedia – which is "We have managed to supposed to eliminate increase both the number of technological barriers to CTI calls we take - which now

> 'scalable" from the desktop across on entire business and can work with a wide variety of hardware and software. Mr Larry Jacobs, managing director of Versit, says: "Although the CTI market is exploding, the industry has failed to provide developers with a truly open, powerful and all-encompassing framework for delivery of

telecommunications show in

Hannover, Germany, the

so that applications are

cross-platform CTI applications." be says. The Versit CTI framework represents a tremendous step forward in helping the industry move towards eginless computer telephony integration."

Geoffrey Wheelwright

Notebook

with docking

to one another, using the know the address of each comcodecs. However, different global computer network like a puter. Unlike an e-mail codecs work best at various alsphone system. address, which identifies a signal speeds and it is impor-The prospect of free user, the address of a computer tant to choose software that is

BT's PC Videophone: making a voice-only call over the internet is a lot more tricky - let alone a video call

long-distance telephone calls excluding the cost of Internet access - has lured tens of thousands of personal computer users to explore this latest advance in Internet technol. ogy. However, voice communication over the Internet is not going to put the telephone companies out of business

overnight. Making a voice call over the Internet is a lot more tricky than picking up the phone, and the results are not always as satisfactory.

The biggest problem with using Internet phone software in Tokyo, what will you hear? is that both parties must be "logged on" to the Internet to connect the call. This seriously limits the use of the software for PC users who have "dial

on the Internet - known as an IP address - is not always the same. In particular, many Internet access services assign new IP addresses to users each time they dial into the service.

Internet phone calls are therefore connected via a third computer, or server, that acts like a telephone exchange. The server matches the names, rather than the computer addresses, of registered users. Assuming, however, that you

between your PC in Los Angeles and your friend's PC Voice signals sent via the Internet are converted into packets of digital data. In the-ory, digitised sound should exceed the fidelity of analogue

have made a connection

designed to suit the speed of

Signal delays are almost inevitable in conversations conducted over the Internet. This is because the signal may pass through dozens of other computers before it reaches its destination. The effect is to insert a short delay between the time you speak and the time the listener hears what you say. However, the annoying "echo" effect - all too familiar to those who make frequent international phone calls - does not occur on inter-

net calls. To conduct a two-way conversation with simultaneous speech, a "full duplex" sound card is needed. Currently, most sound cards are "half duplex".

Cu-SeeMe, a program developed at Cornell University adds another dimension to internet telephony with audio and videoconferencing over the Internet. The program is

500,000 Internet users.

aiready used by more than

An enhanced version of Cu-SeeMe was recently launched as a commercial product by White Pine Software of Nashua. New Hampshire. (http://www.cu-seeme.com). Real time video and audio conferencing can be achieved with a 28.8k modern, while audio conferencing is available on a

14.4k modem. Computer to computer phone calls via the Internet are just the beginning. Experiments are under way to enable computer users to make calls via the internet to regular tele-

An Internet Telephony Project at the Massachusetts Institute of Technology, also plans to explore the development of phone-to-phone connections through the Internet.

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Until now, choosing a portable PC could mean compromising on power and flexibility. Elonex's NB-500/I notebook changes all that. Even the basic specification of the NB-500/I offers PCI Pentium power and a colour screen. And its modular design means that despite its small size and light weight, users benefit from a wide range of alternative configurations, including an optional CD-ROM drive. This Notebook has been designed to beat the best in the world, matching the versatility and processing speed of much bigger and heavier machines, its Pentium processing power, multimedia capabilities, upgradeability and performance certainly puts the NB-500/l in a class of its own.

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Multimedia Services Affiliate Forum

Business class for the Internet

Computer companies such as Lotus, IBM and Novell are building global networks by forming alliances with global and regional telephone companies. Although there is a need to ensure that these Forum. services work together, there is a much more critical need to ensure that each telephone company implements the same computer technology in the same manner, to ensure that a truly global network is created and that regional incompatibilities do not creep

Customers want to be able to integrate data, image, text, video and voice from their computers and communicate with other users of the same

or similar networks. "The ability for customers to choose the best services to meet their needs and to be sure of interoperability with services selected by others is

very important for sustaining the market growth for these services," says Mr Peter Eisenegger who is vice-chairman of the Multimedia Services Affiliate

The forum was launched in February 1996 to address these issues. It is a group of leading international telecommunications service, technology and content providers, who have joined forces to develop these interconnected global

networks. Used for business communications, these networks provide security. navigation, reliability and customer care, combined with the global reach and ease of use of public telephone networks.

They will also link to the Internet to exploit its global ubiquity and new business

founding members of the forum are AT&T, Bellcore, Bell Global Solutions, BT, Cisco, CompuServe, DaCom, Deutsche Telekom, Electronic Trade Center (Finland), Folio (content publishers), GTE, IBM Global Network, ITK Telekomminikation, KDD (Japan), Korea Telecom, Lexis-Nexis (content publishers), Lotus, Microsoft, Novell, NTT Corp. Siemens Nixdorf, Singapore Telecom,

Telecom Italia, Telecom Malaysia, Telstra and Unisource. France Telecom has committed itself to join later in 1996 and Netscape is expected to join and an active recruitment campaign is under way. In response to customer

demand, the forum's work will concentrate on Lotus Development Corporation's Notes Public Network.

server and tool technologies. Novell's NetWare Connect Service and NetWare Directory Service and Cisco Systems inter-networking software. Multi-point desktop videoconferencing and collaboration tools are expected to follow shortly. Initial deployment will be in the first half of 1996 with pilots running in the second half of 1996. A Customer Council has

been formed to give users a chance to communicate their needs. The forum believes that the services it promotes will provide a "business class" area of the Internet. providing better quality services at a higher price. Further details of the forum are available at http://

www.msaf.org.

Rod Newing

Towards speech processing

Computer software is beginning to understand sounds, words and grammar. This allows it to process text, so that we can dictate and translate between languages

n a few years we will be able to speak into a microphone and see our words appear in a foreign language on a computer screen as we

This is the expected outcome from two separate initiatives in similar growing markets, and language translation. Voice recognition technology can be used to recognise spo-

trol a computer by voice, allowing users to keep their hands free. However, voice recognition is at its best when used specifically for dictating text direct

ken commands in order to con-

into the computer. Voice dictation systems have been available for about three years. They are intended for professional people who do not have the keyboard skills they

been in vertical markets such as the medical profession, where specific vocabularies have been created to allow staff to work with their hands

In general commercial offices, a number of pilots have been undertaken successfully. Large-scale roll-outs are just beginning to happen, with 40 or 50 users, and larger-scale deployment will follow.

"We are beginning to get hids for 1,000-user systems," says Ms Anne-Marie Derault, worldwide head of language solutions for IBM. "It has been spreading by word of mouth from happy users, but interest has now spread to board level." at \$100m with a growth rate of 25 per cent per year. Dictation systems still

depend on users speaking each word separately and clearly in a monologue. The software uses a model of the user's voice pattern, together with spelling and grammar checkers, to recognise words and sentences in context. Users have to train the software to understand their voices by correcting errors through the system, which constantly updates the voice model.

the early applications have continuous dictation, but most of us are unable to speak without running our words into each other. "This merges sounds and creates ambiguity which multiplies the complexity," explains Ms Derault. "More computing power is needed to solve these problems, so it is still about three



Dragon. The IBM Voice Type

dictation window before being

transferred to the appropriate

Dragon makes great play

application.

IBM resellers AllVoice have amended Voice Type to record Dictation system requires text direct into an application. to be recorded in a separate Competing systems are also available from Kurzweil and

Most of these systems work well with notebook computers, as well as desktop machines. Philips have just announced their SpeechPad, a hand-held dictation unit with voice recognition built in, for downloading direct to a PC.

Software is playing an increasing role in the translation of text from one language to another, known as "machine translation."

The technology is not perfect, but it gives an indication of the content of a document and therefore allows the user to decide whether it should be professionally translated," explains Mr Jim Lewis, president of Globalink, the world's leading supplier of translation errice.

For instance, a foreign mail can be sent to be translated automatically. If it seems important when it is returned. the original can be sent to a professional translator."

Translation software, like voice recognition, looks at whole sentences, using algoithms to establish the mean-

ing of words from their context, so that they are translated intelligently, not literally.

Translation by computer is difficult because human language is often complex and ambiguous," says Mr Martin Turner, managing director of CompuServe UK, which provides such a service to its members. Many words and phrases can have different meanings, depending on their nntext

"Vocabulary evolves continuously, with new words being added, and others disappearing from common usage, and long and complex sentences are difficult for computers to analyse. As a result, the quality of translations produced by computers is much lower than

ıman translations. "However, machine translation can produce an understandable rough draft translation in a very short time."

With the arrival of the Internet, a large quantity of foreign language material is publicly available which needs to be translated. Mr Lewis points out that even people who speak English as a foreign language during the course of a day, prefer to read documents in their

Machine translation is available over the internet from several sources. Readers can sess its effectiveness free of charge by accessing http:// wirn globalink.com. The result will be e-mailed back within 24 hours without human inter-

One problem with writing translation software is that of finding software developers to write it. "There are only about two dozen people in the world who are both good programmers and good linguists," Mr

> Globalink is developing a new technology, code-named "Barcelona," to support its software products. Barcelona is a meta language which seeks to divorce sounds from words, allowing programmers and linguists to work separately.

"Software is good for casual correspondence or getting the gist of a document, but it was not designed as an outbound tool, except in the hands of a professional translator," Mr Lewis concludes. Nevertheless, he has a vision that one day a translation option will be installed on nearly every PC worldwide, and be used as commonly as spellcheckers are

When the voice and translation technologies converge. people without a common language will be able to communicate by speaking into a com-puter. This will be a wonderful use of technology.

at work

voice recognition

Trends in :

It is just a pity that the industry has been unable or unwilling to develop a keyboard for professional users, instead of making us struggle with one developed for a type-

Fortunately, this article was repared with assistance from IBM's Voice Type Dictation System. It has not, however been machine translated through a dozen languages and back into English, even though it may read that way!

SIPC By Geoffrey Wheelwright

Riposte to Network Computer

The technologies of SIPC will make the PC platform the centre of entertainment, communications and productivity in home and office, says Bill Gates

t has only been three months since Mr Larry Ellison, president of Oracle, first sent a shockwave through the computer industry by showing off a prototype of a \$500 internet access device - called the "Network Computer" - that he claimed could supplant the personal computer in popularity.

The merits of Mr Ellison's idea are currently being debated by pundits all over the industry - and in early April, industry leaders (including Compaq and Intel) made what response to it as they rallied around an initiative from software giant Microsoft.

Known as Simply Interactive PC (or SIPC) - and backed by leading companies such as Compag Computer, dominant chin maker intel and Toshiba - this effort appears custom-designed to meet and then beat the standards that Mr Ellison set for his network computer.

Microsoft chairman and cofounder Bill Gates unveiled this "framework of hardware technologies" for use with Microsoft Windows operating system-based personal computers as a full-scale riposte to all the talk of \$500 internet appliances, According to Mr Gates, the technologies of SIPC will make the PC platform the centre of entertainment, communications and productivity in both home and office, providing the case of use and convenience of a consumer appli-

Mr Gates described and demonstrated key technologies and prototypes for SIPC to more than 3,000 PC hardware engineers and executives in San Jose, California at the Windows Hardware Engineering

Conference 96 (WinHEC 96). The demonstrations included shanced audio, processed and driven from the PC through a consumer stereo system; highperformance 8-D graphics; connectivity between the PC and consumer electronics devices; playback of "digitally perfect" audio and video; and "sealedcase concept PCs" that never need to be opened for users to connect and add new devices. Leading hardware companies - including Compaq Com-

outer, Hewlett Packard, Intel and Toshiba America Information Systems - were quick to endorse the SIPC framework and its associated technologies. Mr Gates invited the PC hardware industry to join Microsoft and begin making SIPC a reality immediately.

"While the PC is easier to use today, we should not be satisfied," Mr Gates said. "SIPC technologies will make the PC as easy and convenient to use as other home appliances. PCs will not only be more interactive and fun. they'll also be easier to connect. to consumer devices such as VCRs, stereos and TVs. As the PC becomes a central device for entertainment and communications, it will be placed with these consumer devices in the

something known as the OnNow design initiative for system-wide power manage-ment and instant accessibility. This will apparently mean that, unlike today's PCs, which can take minutes to boot un each time they're turned on, SIPC systems will be instantly available at the touch of the ON button.

"You're not going to go to your PC to look up a new fact

or find out about movies if you're sitting there watching that memory test program run. I don't think there's anything quite as antiquated as that memory test that comes up or those kind of ugly BIOS (besic input/output system) messages that we all see. Those have just got to go away," said Mr Gates. Those are an artifact of sort of our nerdy past, you might say, and definitely there's no problem hiding those things. The basic idea of On Now is that you don't have to turn the machine on. But in order to make that work you have to machine turned off, and just a little bit of logic there monitor-

ing for events that might come "Those events include the user coming and using the mouse or the keyboard; but they can also include a phone call coming in, where you want to immediately detect what kind of call is it and have the right type of software be acti-

vated. Mr Gates says that this is a great example where the hard-ware world and software world have to work together. "We have to be able to detect when we can shut down various system elements, and we have to be able to cycle those back on, and cycle them back on very quickly. We don't want any delay when you sit down and want to start using the

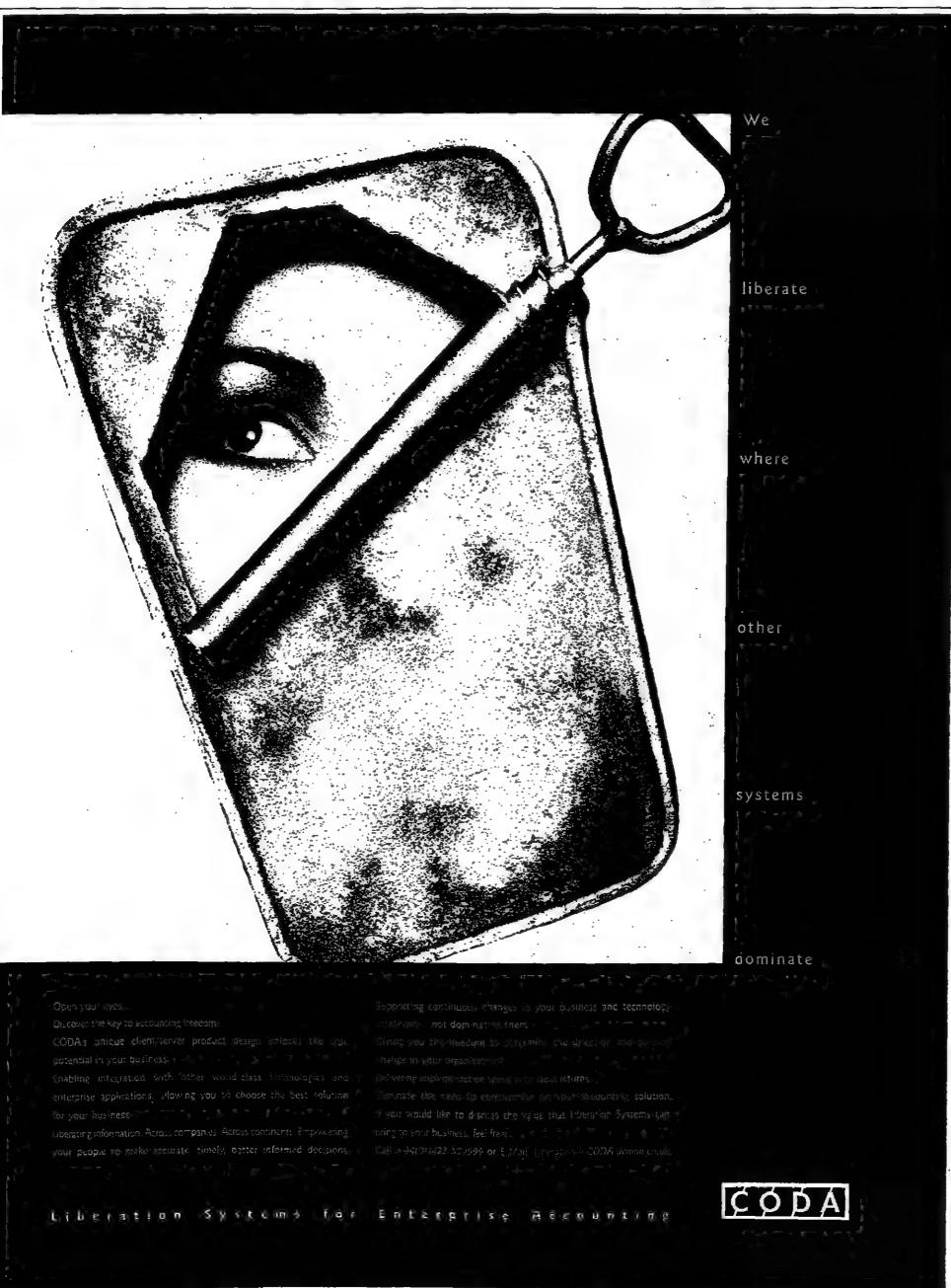
"And so the On Now work is actually an initiative called ACPI - Advanced Configuration Power Interface - that we have a lot of key partners, including Intel and Toshiba, who are helping us drive that forward."

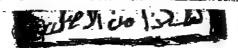
Mr Gates suggests that a consumer with no experience using a personal computer will be able to sit down at an SIPC system and immediately complete tasks such as playing a game, watching a or television programme, browsing the World Wide Web, connecting to a stereo or VCR, listening to voice mail or writing e-mail.

He further claims that extending or connecting SIPC systems to other devices will be as easy as plugging in an extension cord. SIPC technologies include support for new ways to connect to consumer electronics devices and PC pertoherais

He also says that while today's PC users may dread opening the PC case, SIPC systems will not need to be opened. It will be possible for connections to be made while the SIPC system is turned on, with no need to restart the computer.

Finally, Mr Gates pledged that SIPC systems will provide fast access to the internet and will support critical-mass high-speed data pipelines, such as ISDN and cable modems, to the home. He says SIPC systems will support state-ofthe art Web browsing, with enhancements to Microsoft's Internet Explorer World Wide Web Browser, and provide full support for e-mail, voice mess-The SIPC design includes aging, conferencing and faxing.





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Notebook users tend to be Notebook users tend to be around with the configuration of their systems more than which leads to problem the configuration and the leads tend to have runting forme application they elso tend to but some standard software And to more difficult for make since the same tends to make s companies to make sure to their notebook users base to companies to make sure to applications because COMMITTED are off size so and Entertained that staff are to the career that a lies, such a career that a lies, such a career that a career that a career that a career that that

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Software at work

CASE STUDY iBM's Voice Type Dictation system

Talking with the Woolwich

This was followed by further

training after two weeks. The

users were issued with stan-

such as transferring text into

the e-mail system, inserting

standard paragraphs and spell-

ing out frequently-used names

Some users ran into busy

periods and fell behind in

their use of the system. "You

must plan the introduction

into a period when users have

the time to devote to it, if you are to achieve the 97 per cent

accuracy which is possible,"

advises Mr Brown. "The sys-

tem won't be effective if it is

they needed to pay attention

to hand-holding, as well as

training, and especially to

making sure that errors are

corrected properly, so the soft-

ware can learn to understand

the user's speech pattern.

Woolwich staff found that

only used occasionally."

in full.

The Woolwich Building because we failed to grasp the Society has found that as long as you pay attention to training and support, voice recogni-tion can bring productivity benefits to busy professional staff.

"Our group resources director saw a demonstration of IBM's Voice Type Dictation system," recalls Mr Alex Brown, a management consultant with the Woolwich in

"He thought it was worth investigating because we have a number of people who produce large quantities of text, but who do not have strong keyboard skills. There was also an obvious saving for business professionals who dictate to their secretaries."

The Woolwich carried out an evaluation of the product which suggested that IBM had a clear lead in this product sector. It bought six copies for an initial evaluation for use in the Legal, Group Audit and Facilities Management departments.

"We struggled initially

training need which the product requires," admits Mr Brown, "so we arranged for IBM to give users some more training. We are used to being very effective with modern software in a matter of hours, but the dictation system is fundamentally different in that it is a product which learns about you in a way other software does not. Depending on your training and how you treat it, you will

get better or worse." The trial lasted about four mouths and the benefits in saving secretarial time through transcription were clearly defined. Mr Brown also identified other benefits in productivity.
The Woolwich then invited

staff to see the system demon-strated and they were offered the opportunity to use the system for a fixed fee, chargeable to their budget. This fee covered bardware, software. training and support. They wanted 20 users, but 30 applied.

These users had the system installed, enrolled to teach the speaking isolated words. software their voice model and

"We found that the system were given initial training. is not appropriate for all staff." says Mr Brown. "There is a degree of individual preference and some people did dard voice macros, which gave them a series of short cuts, not like it. This was partly the way they dictate and partly their relationship with their secretaries. The latter were initially suspicious, but they reacted very sensibly when hey realised that the system can't do all the other jobs which they undertake."

Business professionals who are used to dictating found it was particularly helpful to see on screen what they had said. rather than having to repeatedly replay a tape. Most of the current users find the system ves them more productivity, a (aster response and increased confidentiality.

"I hope that the dictation system will become a product which people can order if they see the need, just like any peripheral," says Mr Brown. "It is important to under-

Alex Brown: There was an obvious

stand that you introduce the system to individuals, not departments. As the technology develops. I am sure voice ition will revolutionise the way in which we use computers both at work and in all other areas of our lives." Contact: IBM Voice Type Dictation 44 (0)1705 492249 or gbībījila ibmmail.com.

This item was dictated using an IBM Voice Type dictation system; the same system used by the Woolwich.

Rod Newing



The MLTT group at Xerox's Grenoble leboratory is researching the structure of language and the way it is used

R&D begins to bear fruit client-server computing

APPLICATION Xerox tackles translation

Language translation has long been seen as a challenge to information technologists. Accurate, readable translation is hard enough for an expert and automation of the process has proved to be a particularly hard problem to solve.

Linguistics researchers at Xerox's research laboratories in Europe and the US have been working on the problem for some years and the first fruits of their research are starting to emerge as practical and usable products.

Translation Ald Network Services (Tans) builds on earlier Xerox research to provide a general-purpose transistion "server" in a

Call Us 24 Hours!

environment. Accessible from a standard Windows PC or through the Internet, it could be an important step towards widely-available language

translation services. Xerox's approach is to concentrate on practical mechanisms for getting at the information held in text

 regardless of the language. The Multi Lingual Theory and Technology (MLTT) group at Xerox's Grenoble laboratory is researching the structure of natural language and the way

it is used. The group is building a language model with a flexible

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rule base to cope with the complexity of language evolution.

Its model of language accepts that words and their usage change according to their context.

The model is the starting point for a range of practical projects. The Tans project is one of the most recent and follows on from Locolex, an earlier project from Xerox which created a translation aid for a deaktop

Locolex uses an advanced technique originating at the Xerox Palo Alto Research Center (Parc) in California. The technique is called

Finite State Calculus, and Xerox says it speeds up text analysis and In addition to analysing

individual words, Locolex examines their context. More accurate - and logical - translation is, therefore, possible.

Tans takes the translation process away from the desktop: he Tans software runs in a dedicated server computer attached to a network.

Translation becomes another service on the network - such as printing or file storage.

The Xarox team at Granoble has built two workstation front-end packages to give "client" access to the Tans features.

One uses the Windows PC environment and a specially-enhanced version of Microsoft Word word processor. The translation feature is an extra function on

the MS-Word menu, The user can select a word in a document and request a translation. Tans can also work from a

standard World Wide Web (WWW) browser such as Hot Java or Netscape which could be running on a PC or a Sun Microsystems workstation. Sun users can also work

through a special interface to access a "professional" service on Tans which gives detailed grammatical analysis of sentenum.

The first Tans systems were installed at the Grenoble laboratory in September 1995 and the preliminary version includes a French to English

dictionary with 40,000 entries. 1,000 idioms and 5,000 "multi-word" expressions.

Researchers are working on extending the system to include other languages.

Several Xerox companies have expressed interest in using Tans to help in the translation of maintenance manuais.

The system has also been proposed for similar use by a large international vehicle anufacturer. In the long term, the aim is

build on Tans to provide a general-purpose translation service which can be made widely available to any computer user faced with

multiple languages in their workplace. Language translation will

always be difficult and will always need some human The Xerox Tans project, however, points the way

forward and promises solutions to many current

Philip Manchester

CASE STUDY

Voice recognition in supermarkets

Focus on shrinkage

The Produce Marketing Association of America prints a handy publication that lists the price codes of some 250 vegetable items. It may not matter to a shopper that artichokes are coded 4516 if small, 4084 if large, but supermarket staff at the till need to use these codes to obtain the right price.

Because many of the till operators work part-time or are only employed for a few weeks, there is no question of them memorising every code. Stores issue books of the codes, but consulting these wastes time and creates queues, so check-out staff often guess some of the prices, entering an amount low enough not to antagonise customers and costing the store money. These sums are known as shrinkage. and it is estimated that in a large group an amount equal to the annual profit from one

site is lost every year. NCR, the US information technology group, has been addressing this issue in collaboration with Kansas-based Balls Foodstores At its Atlanta Human Interface Technology Centre research lab, known as Hitc, NCR has turned to speech recognition to eliminate price code drain on the bottom line.

The Advanced Produce Interactive Cashier Offline Training System is a grand title for Hitc's joint product with Balls Poodstores. Under the more fetching acronym of Apricots, this is a computer-based training

system that teaches check-out stall the different varieties of With 1,000 kinds of apple

available in the US, Apricots is valuable training. Subjects sit in front of a multimedia PC and attempt to identify the type of product from high-quality still pictures and video images. An earpiece acts as the voice recognition system's speaker, and trainees deliver their answers to a microphone on a short boom that extends from the expiece

quite distinct from a microphone headset. Hitc also addresses such issues as human reactions to the technology. NCR scientist Michael Miller says that young male check-out staff, many of them students, are particularly adverse to headsets. "The boys

around to the mouth. This is

don't want to wear a headest. They associate them with jobs like air traffic controller and they think it makes them look like a nerd." As well as soothing juvenile egos this system is effective in

educating staff and cutting down on quenes. Words do not have to be enunciated robotically, with

The next step, one that Balls Foodstores has yet to commit itself to, is Hitc's Advanced Produce Point of Sale, or Apropos. This dispenses with the wired link between microphone and PC.

Mr Miller thinks that infra-red communication, similar to a TV remote control. is the most likely path for Apropos. Staff can speak conversationally, recording the items in terms such as "a five pound bag of large onions" and the point of sale (PoS) system will automatically translate their words into a price code. A synthetic voice repeats their words via the earpiece, thus allowing any error to be

> A colleague took two minutes to check the items through the sample PoS

Mr Miller says improved speech recognition algorithms and contemporary PC power are his means of delivering accurate voice recognition. Today, a PoS system is basically a low-end PC with a cash till. Such is the extent of

shrinkage caused by faulty produce codes that supermarket groups have indicated to Hitc they will pay \$1,000-\$1,500 extra for every PoS in order to introduce "We can deliver it well

within those constraints," says Mr Miller. He relates a personal experience that convinced him voice recognition has a future at the



trant to west a beside

check-out. Last year he had sent his collection of plastic fruit ahead to an IT industry event in Houston only to find a supermarket chain pitching up in Atlanta demanding an impromptu Apropos demonstration.

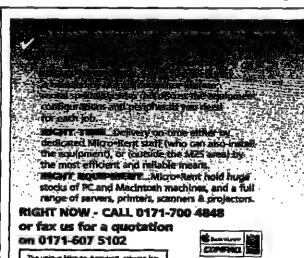
Mr Miller stopped at his local supermarket and filled a trolley with 20 kinds of vegetable. "My cashier had only been working for 10 weeks. He identified 18 items and knew 15 produce codes."

The cashier consulted produce guides and other staff - which meant that Mr Miller spent a total of 14 minutes paying for the goods, while an increasingly irritated queue eathered behind him. Back at Hitc. an NCR colleague took two minutes to check the items through their sample PoS using Apropos.

Apropos is not a production system as yet, but the very fact that supermarket chains are unable to calculate the precise wastage caused by the produce code system could guarantee a very rapid roll-out across US

And countless staff starting their working lives in supermarkets will not have to endure the ritual of memorising artichoke codes

Michael Dempsey



The unique Hire-to-Acquire" scheme less you rent until you decide it's the right time (and the right squipment) to buy Tilig-io-Acquire is not available to installable Empil systematement units, computer clear English the only voice

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CASE STUDY

Volce-operated dictation

Software catches up

managing partner of ercial law firm Pettman Smith, first tried to find a system which allowed him to dictate correspondence into a computer terminal, he was told he was at least three years ahead of any commercially viable voice-operated software. Just a year later, in 1991, Pettman and Mr Chris

When Mr Michael Pettman, a

William, his IT supplier, client and friend, of Advanced System Architecture, were so impressed with VoiceWriter, from US company DragonDictate, that they agreed to distribute it in the

"Our secretaries were typing a legal document, having it amended, re-typing it, having t amended, and so on," Mr Pettman explains. "VoiceWriter allowed one of our eight partners or 12 fee earners to change the text as he or she dictated it. We didn't have to wait for something we'd spoken into a machine but never actually saw, to be typed and returned to us for approval.

"VoiceWriter did – and does - save us a tremendous amount of alteration time, since we can see what we write instantly; it gives us total and immediate control

over our own work." The system also frees secretaries to take on other, more important tasks. "This not only gives them greater job satisfaction, but utilises their talents in a more productive way," says Mr

Pettman. Last year, VoiceWriter was sold to Canadian company Kolyox Communications. Mr Pettman is now distributing Kolvox's product, based on the Kurzweil Computer Producti Voice operating system.

The Kolvox system is very similar to VoiceWriter, and looks more or less the same on screen. Both have dictionaries of more than 200,000 words, but 50,000 of these are active at any one time in Kolvox's system, compared to 80,000 in VolceWriter. Mr Pettman believes that

speech recognition is slightly more reliable in the Kotvox product, too, although corrections are easy to make in either. When the user says "oops", the system goes back to the incorrect word and supplies a menu of similar sounding words to choose from. If the correct word is not listed, the user types it in. Rach system enables the

user to add as many special words - that is industry specific terms - as they wish, and to incorporate phrases as single words by running words together to create one sound, For example, Mr Pettman

can say: "inconnectionwith" as one word; the system will print: "in connection with". In addition, Mr Petiman can create a voice macro by saying one thing to obtain something totally different. This enables standard paragraphs to be stored, which are recalled by

just a word or phrase.

wants to include the memorandum and articles of association paragraph, he just says: "Mems and arts". If he says "YS", the system provides two carriage returns, prints "yours sincerely", provides three carriage returns, and prints "M Pettman". VotceWriter enabled Pettman Smith to reduce

every two fee-earners. At its peak use, about 10 people had VoiceWriter on their desks. Due to a large turnover of staff and the change from VoiceWriter to Kolvox, however, only three or

four are using VoiceWriter at present; Mr Petiman

secretarial support from one

himself has Kolvox on his machine. But once Pettman Smith has finished installing the Windows operating system throughout the practice, new staff will be trained to speak to Kolvox, instead of a dictaphone. "We still have to speak very slowly into the machine," Mr Pettman admits "as it cannot recognise normal speed speech patterns.

"But the advantages of the system are tremendous. The editorial control it gives us improves efficiency, and document bernround time has speeded up tremendously. It will even print envelopes when we tell it to." But no one yet has invented

and put it in the post. Marcia MacLeod

a machine to seal it. stamp it.

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James Essinger

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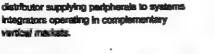
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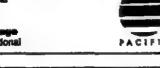
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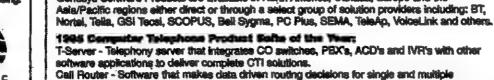
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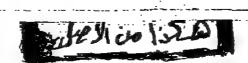
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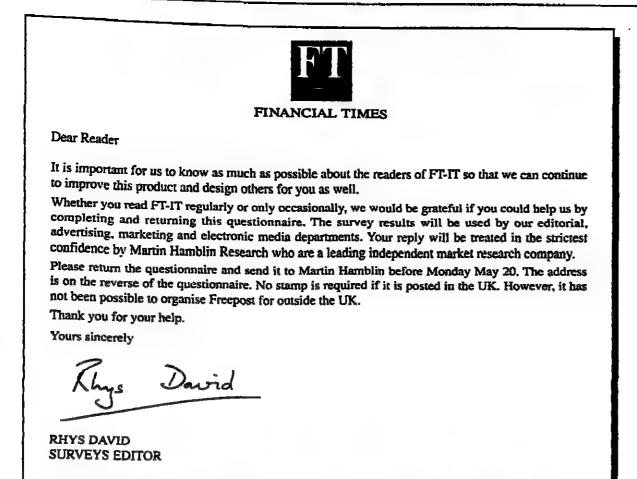
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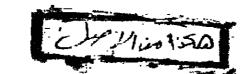
10. Are you?			(22)
Working full-time	Πī		
Working part-time	□ 2		
Studying			
Retired	 □-⁴		
	د 🗖		
Running the home			
Looking for a job	□ •		
11. What is your country of residence?			(23-24)
12. Do you use a PC? (Tick more than one if	relevant)		(25)
At home	Ďι		
At work	□ ²		
When travelling	_; _;		
Don't use a PC	 □•		
Don Luse a Po	Q ,		
13. is your PC?	At work	At home	(26-27)
A laptop	Q	□ i	
Desktop stand alone		Q2	
Desktop networked		□3	
Don't use a PC		□4	
	-		
14. Do you have a modem?	At work	At home	(28-29)
Yes		٦٠	
No		□-	
15. is your modem speed?	At work	At home	(30-31)
Less than 14,400 baud		□ ·	,25 5 1,
14,400 baud		<u> </u>	
•	ö	ث	
28,800 baud	_	_	
ISDN		□4	
Don't know		□ ⁵	
Don't have a modem		Q 6	
16. What PC services do you use?	At work	At home	for con
-	At Work	At nome	(32-33)
Corporate e-mail	_	_	
Internet e-mali		□ 2	
Internet web access		□³	
On-line services	Q	□4	
None of these		□ 15	
	• •	_	
17. Do you use any of the following?	At work	At home	(34-35)
CompuServe		□¹	
America On-Line/Europe On-Line		□ 2	
Microsoft Network		□ 3	
FT Profile		□4	
Knight Ridder		s	
•	_	_	
18. If you use the web, how many different site			
do you visit during a typical day?	At work	At home	(38-37)
1-2		□ ı	
3-5		□ 2	
6-10		□ 3	
Over 40		□4	
(B/OF 11)		400	
Over 10	_		
Difficult to say		□s Dr	
		□ 5	
Difficult to say	_	_	(38-42)
Difficult to say		□ 6	()
Difficult to say Don't use web 19. Which sites do you visit most frequently?		□ 6	
Difficult to say Don't use web 19. Which sites do you visit most frequently?	·	□ ₆	
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Difficult to say Don't use web 19. Which sites do you visit most frequently?		6	
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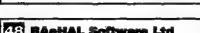
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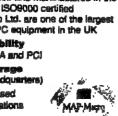


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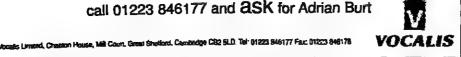


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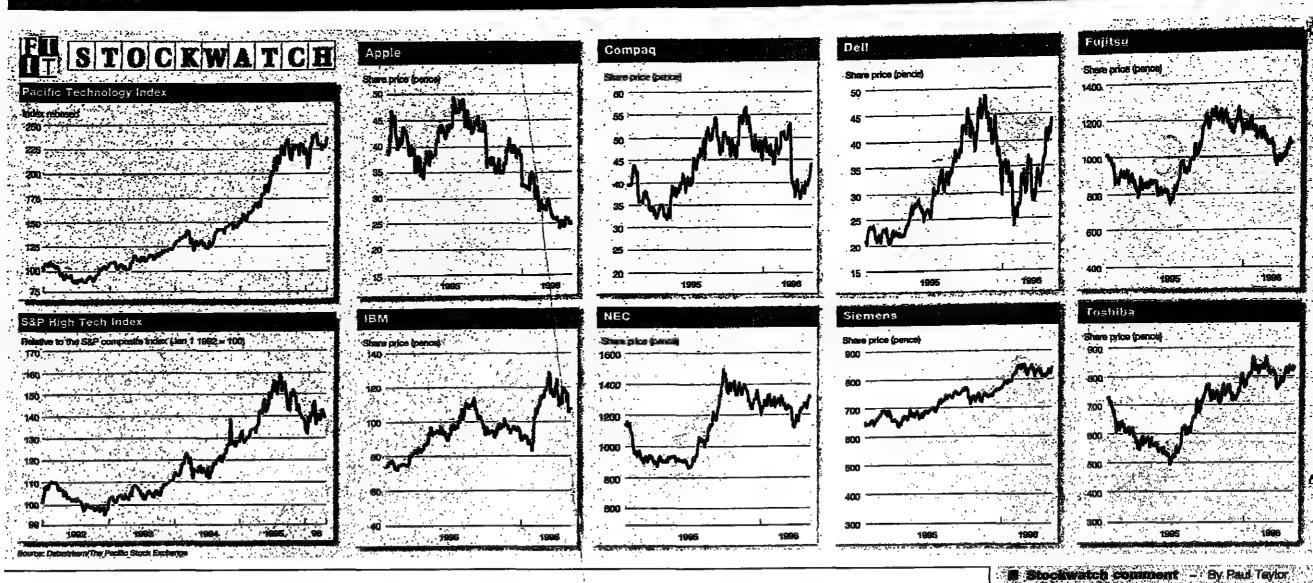
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US results set the pace

'Market dynamics for 1996 appear to be strong worldwide' says Compaq chief Eckhard Pfeiffer

eading information tech-nology shares continued to rebound last month, buoyed in part by generally better than expected first-quarter results from US-based companies including Microsoft, Intel and Compaq and mostly positive comments on the earnines outlook.

Microsoft's shares rose after it announced earnings that suggested the computer industry was bealthier than portrayed during the first three months of the year, while Intel's shares jumped 4% to 64% a day after reporting firstquarter earnings that exceeded

analysts' forecasts. Like Microsoft, Intel also was modestly upbest on the outlook for the current quarter, as was Compaq, one of the leading manufacturers of portable PCs, which reported a 42 per. sales to \$4.2bn last week.

Mr Eckhard Pfeiffer, Compaq's president and chief executive, claimed the company had gained market share "as a

result of the decisive steps we took to competitively position our desktop and server products." He added: "The market dynamics for 1996 appear to be strong worldwide."

Shares in Compaq have risen sharply over the past six weeks, as have shares in Dell Computer, another leading portable computer manufacturer. Shares in Toshiba, the portable market leader, also continued to rebound.

However, shares in Interna-tional Business Machines remained under pressure despite reporting strongerthan-expected first-quarter operating sernings and a longanticipated increase in its querterly dividend. Similarly, Apple Computer's

pressure as the group's new chief executive continued to cant increase in first-quarter grapple with Apple's problems. In contrast, Olivetti's troublesome personal computer subsidiary has begun to recover from years of heavy

shares also remained under

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K funds miss out on US rally

A long-term enthusiasm for the Pacific basin led to a short-term slip-up in the US

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There is comfort in crowds. UK pension funds may have been totally wrong about the prospects for the US equity market in 1995, but at least they were

That funds had more assets in the Pacific basin (ex-Japan) in 1995 than in the world's leading economy may seem odd to the casual observer. But it is a logical outcome when an industry uses itself, rather than an outside index, as its If the consensus among pen-

sion fund managers is that US equities are overvalued, the median fund will have a small weighting in North America. A fund which matches the weighting of the US in the FT-A World (ex-UK) index would have a portfolio much more skewed to Wall Street than its peers.

In 1995 such a portfolio would have heavily outperformed its rivals. But the chances are the manager would have received few plaudits for such a performance. and would have been criticised heavily had Wall Street declined sharply.

This herd mentality means

that the asset allocation of the pension fund industry changes slowly over the years. It may also explain why funds have apparently been slow to respond to the 1995 Pensions Act, which set a minimum funding requirement.

The Act was expected to make funds buy more bonds, as trustees strived to match

assets with liabilities. Pension funds are stendily becoming more mature, with a growing obligation to meet the income needs of current beneficiaries by investing in bonds, rather than using equities to provide asset growth to help fulfil future liabilities.

Although pension funds modestly increased their exposure to bonds in 1995, the proportion of funds invested in conventional gilts was the same ~ 6.1 per cent, according to the WM Company - as in 1990, when UK government bonds were in a bear market. l'unds' low weighting in con-

ventional gilts - in 1996, the holding was 16 per cent might seem surprising since the last decude has been a relatively good one for bunds, Since the start of 1990, conventional gilts have produced a cumulative return of 104.7 per cent, compared with 95.4 per cent from UK equities. And the 1995 Pensions Act was trailed by the Goode Report, which was published in 1993, so funds were well aware that they might need to make a long term shift towards fixed-interest securities.

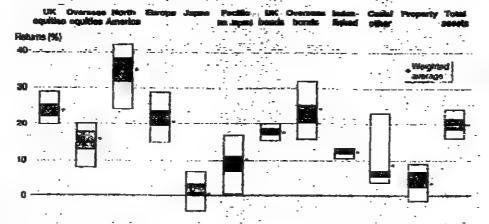
However, the provisions of the Act are only being phased in slowly and will not take full effect until the next decade. Funds have no need to rush. indeed, they received an excess return from UK equilies of six percentage points over conven-tional gilts last year.

There was a shift into the index-linked sector of the gilts market, however. The proportion of portfolios in indexlinked rose from 3.7 per cent in 1994 to 4.3 per cent last year, the highest level for a decade. Mr Gordon Bagot, research and consultancy director at WM, says that this rise was

Returns and asset mix on the WM All Funds universe. ond 1995

	Returns (%)	Asset Mb((%)
UK aquities	23.6	
		54
Overseas equities	15.7	E3
North America	06.1	4
Europa	21.7	8
Jupan	0.5	5
Pacific (ax-Japan)	10.5	5
Other International	-2.2	7
UK bonds	17.6	6
Oversam bonda	23,7	4
Index-linked	121	4
Cash/other investments	8.5	5
Total assets (Ex prop)	20.2	95
Property	3.5	5
Total questa (ino proci-	19.1	100

Returns and ranges 1995



WM all funds universe; esset cals

due to a limited number of big. mature pension funds moving heavily into the index-linked field, rather than a general shift by all funds.

On the equity side, funds continue to have a heavy weighting in the UK. It is arguable whether this is justified -UK equities have underperformed overseas shares over the last three and five year periods, although they did better in 1995, and over the ten years since 1986. A strong UK weighting is justifiable from the liability-matching point of view and gives exposure to growth in overseas economies through UK companies' substantial export earnings and overseas operations.

The proportion of pension fund portfolios invested in UK shares has edged down from the peak of 57.8 per cent

reached in 1992, but still represeuts a hefty 53.6 per cent.

Overseas equity holdings have generally edged higher over the past 10 years, although with dips in 1987 and 1990. After peaking at 24 per cent in 1993, they were down to 22.7 per cent in 1995. There were a number of rea-

sons why managers missed out on the US market, which offered returns of 35 per cent last year. Mr Ian Beauchamp, director and chief economist at Hambros Fund Management says: "In 1996, nobody believed that the US was going to enjoy a soft landing but interest rates fell and the resulting liquidity was invested in finan-

Mr David Berry, director of investment strategy at BZW that "people misread the

extent to which the US had taken to heart the process of restructuring". Despite the fact that many investors have doubts about the valuations on Wall Street, he feels that funds' ildings of US equities may

have reached a secular low. He adds that missing the US bull run was not quite as disastrous as it might seem. Funds were substantially overweight in continental Europe and the Pacific, and in some areas, for example Switzerland, did as well as in the US last year. Over five years, the Pacific basin has pipped returns from North America by six percentage points per annu

Europe has been a favourite area for pension funds for some time, but Hambros' Mr Beauchamp warns that European governments have little scope for further cuts in interest rates and that company earnings will disappoint.

Property has been steadily declining as a proportion of pension fund portfolios, from 11.2 per cent in 1965 to 5.3 per cent last year. That is hardly surprising in the light of the category's poor performance; over the last 10 years.

in the US, some securities firms have been arguing that property is not a successful inflation hedge for institutional investors and that a basket of commodities would be a more suitable substitute.

Finally, while there was an increase in cash weightings last year, this should not be taken as overwhelming evidence of manager's caution. At 4.5 per cent, cash holdings are still well below the 6-7 per cent

■ Gifts: by Richard Lapper

More of the same please

Funds' growing appetite for these bonds does not extend to repo transactions

A combination of economic and regulatory pressures is forcing pension fund managers to step up their gilts investments. Figures from the Cen-tral Statistical Office, published in March this year, show the extent of the growth in interest. Pension funds have roughly doubled their holdings of gilts since 1991, with net flows rising from \$2.77bn in 1992 to \$2.83hn in 1993 68.4hn in 1994 and £7.2hn in 1985. Flows into the gilts market were negative to the tune of £3.44bn in 1990.

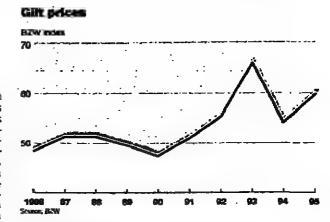
By the end of 1995 pension fund holdings amounted to some £49bn, compared with only £24bn in 1992. During the same period pension funds have reduced their holdings of UK and overseas equities, with net investments dropping by 26.83bn in 1995. During 1994 they recorded a modest rise of £370m.

Holdings of overseas equities have also dropped, declin-ing by nearly £5bn in 1994 and rising by a mere £4m last year. There is also some anecdotal evidence that within this general context funds have begun to increase their holdings of index-linked paper in particu-

"We have seen more investment in index-linked paper than in conventional gilts," says Mr Paul Abberley, a director with Lombard Odier Investment Management Services. "Actuaries are saying that index-linked is the way to go and allocations to indexlinked are becoming more

The shift is occuring for several reasons. Since the early 1990s inflation has fallen steadily in the UK, reflecting international trends as well as the success of the government's new counter-inflationary strategy, including the ption of an inflation target and a greater degree of independence for the Bank of

This has benefited gilts which have underperformed equities to a much lesser extent. BZW's gilt price index rose by 8.7 per cent in 1992 and 19.3 per cent in 1993. The index fell by 18.1 per cent in 1994 before recovering by 10.3 per cent last year. Meanwhile



BZW's equity price index rose by 14.8 per cent and 23.1 per cent in 1992 and 1993, fell by 7.9 per cent in 1994 and rose by 18.6 per cent last year.

"If we are moving to an environment where inflation is going to be lower, there will be less to lose by investing in gilts," says Mr Simon Briscoe, chief UK economist at Nikko Securities, the Japanese secu-

All of these changes are affecting the psychology of both pension fund trustees and their investment managers. Mr Briscoe says that the latter are re-evaluating their overall approach to the market. "If gilis bave outperformed equities in a certain quarter, the fund manager knows he will be under pressure from trustees. They are very nervous about missing out on gilt ral-

Despite their increased exposure to gilts, pension funds are as yet showing little interest in two of the main elements of gilts market reform introduced over the past year and a half. Repos - introduced for the first time in the UK earlier this year, when restrictions limiting bond borrowing and lending were removed - have been more or less ignored by



The Bank of England has played a

pension funds. Although repos should increase the extent to which

pension funds can earn extra revenues on their bond portfolios, most of their investment managers make use of tradi-tional stock lending arrangements for this purpose, and have been reluctant to modify systems and develop the documentation necessary to participate in the new market. One problem frequently mentioned by investment managers is the technical difficulty of managing the large quantities of cash generated in repo trans-

actions. "Repos have been slow to take off," says Mr James Johnstop, investment director of UK fixed interest at AMP Asset Management. "Many managers are still using stock lending facilities. Repos can sometimes offer a higher return but there are costs involved in starting to use

"It may snowball down the line but it is a slow process." adds the head of gilts sales at one market-making firm. "People are watching and waiting to see the effects.'

Strips, zero coupon bonda created when the coupon is stripped from a bond and traded separately, which the government will introduce early next year, will also have relatively few attractions for pension fund managers - at least in the short term. New instruments, such as longerdated zero coupon bonds, will allow them to take tactically bullish views more easily.

Investment managers say that they are unlikely to use strips in a strategic fashion on behalf of pension fund clients, and that insurance companies are more likely to use the new instruments for matching assets and Hubblitten

Derivatives: by Samer Iskandar

Faith eroded by scandal

The slow expansion of derivatives instruments into the pension fund market has stalled

The aversion of many pension funds to derivatives is enshrined in restrictions or outright prohibitions in their trust deeds, the blueprints for their management. This fear has been reinforced by recent scandals, such as the collapse of Barings, nipping in the bud a shift towards greater exposure to geared instruments prompted, in part, by the maturing of many scheme

Approximately half the pension funds in the UK are now allowed - or allow outsiders who manage money for them to use financial derivatives. However even among those, only a small proportion actually do use them. According to the WM Company, which measures the performances of 1.455 pension funds, only 479 of these make use of some form of derivatives. The underlying amount of derivatives traded by these funds in 1995 was in excess of £40bn.

Traditionally, the trustees and directors who oversee the management of funds have been risk-averse, because they are ultimately answerable to the pensioners. In recent years bowever, as funds have me more "sophisticated", they have been compelled to relax their restrictions in order to remain in line with fast-developing markets. But overall the use of derivatives is still strictly controlled.

"Pension funds are increasingly relying on these products for tactical asset allocation, and sometimes to manage their currency strategy", says Mr Graham Wood, a client consultant at the WM Company. "But the vast majority still use them only to hedge the currency exposure on their holdings of foreign equities."

Currency hedging is usually achieved through conventional currency swaps, rather than the use of more leveraged instruments. A few years ago, pension funds started to trade currency options, but the amounts involved have shrunk sharply in the wake of recent

One futures and options salesman at a large Swiss bank recalls: "Between 1990 and more sophisticated options trades for pension funds. Most of them stopped, and those that still trade options now limit themselves to buying calls or puts.'

Asset allocation via derivatives is usually a precursor to buying the underlying asset: to avoid underexposure, or the possibility of missing out altogether on a strong market performance, the fund manager will invest in index futures or futures funds – that replicate the market's performance during the time it takes to purchase the underlying sets, a process that can take several days for very large amounts. Usually, at the end of the stockpicking process,



Barings bogeyman: Nick Leeson's

futures positions are substantially reduced.

There is also a marked behavioural difference between companies that manage their pension funds internally and those that subcontract this task to outside fund managers. The former tend to shy away from derivatives altogether, mainly because their trustees are not equipped to evaluate the risks. When the funds are managed by outsiders, the trustees always impose strict guidelines.

According to Mr Heinz Binggeli, managing director with Emcor, a US risk management consultancy, the most common caveats are "use derivatives only to hedge", or "absolutely no leverage". Structured notes are almost always excluded.

Incidents such as the Barings collapse or the losses incurred by Orange County have left their mark. Mr

of the European Derivative Investments and Funds Association (RMFA), points to "a dip in derivatives usage between 1993 and 1995". According to a recent study by Greenwich Associates, a US financial mar kets consultancy, only 2 per cent of US and Canadian public sector pension funds and 3 per cent of endowments which did not use futures in 1995

1993 the levels were 6 per cent and 8 per cent respectively.
Attractive returns in emerge markets are increasingly tempting fund managers, but limited liquidity in most of these sectors has always acted as a deterrent. The use of equity swaps, which allow an investor to achieve the performance of a given market, say Mexico, by pledging the returns of another - shares listed on the London Stock Exchange for example - offers a very efficient way to circum-

would consider using them. In

vent liquidity problems. Index futures, as well as options on individual stocks, are used by some managers as a way to benefit from emerging markets' performance without investing large sums. Fiscal considerations can also lead to the same logic foreign investors in Italian bonds, for example, can claim back a 12.5 per cent withholding tax on coupons; but the

process can take several months. Fund managers find it. easter to trade Italian bond futures to achieve the same performance, while avoiding sociated problems and costs. New over-the-counter products offer the chance to lock in a market's performance and

then retain the upside poten-

tial with a total guarantee

The minimum funding ent (MFR), which will be gradually implemented in the UK in coming years, is also likely to boost demand for hedging instruments. Mr Girish Reddy, co-head of equity derivatives at Goldman Sachs, believes that by imposing a minimum level of pension fund assets to liabilities, the MFR "is likely to make pension fund managers more sensitive to the downside performance of their assets relative

Global bonds: by Barry Riley

Sticking to the foothills

Funds' exposure to the mountain of outstanding debt is unlikely to rise significantly

Global bond returns once again switched rapidly from rags to riches in 1995, and after the disappointments of 1994 there was a strong case to be made for the establishment of global bonds as a separate asset class

for pension funds. The big UK pension funds in WM Company's WM 50 Universe did especially well in overseas bonds last year, scoring a return of 25.7 per cent, higher even than the 23.7 per cent return on UK equities and some eight percentage points higher than UK gilt returns.

However, British pension funds remain unenthusiastic about global bonds. The average allocation was little nged last year at 3.6 per cent of aggregate year-end assets, and in fact the exposure has scarcely changed since 1991. Meanwhile exposures to gilts - both fixed interest and index-linked - have climbed from 7.0 per cent to 10.4 per cent over the past two years.

In contrast US pension funds appear to be taking a more positive view about the role of global bonds in their portfolios. A number of specialist bond management firms in London are benefiting from a flow of business across the Atlantic. "There is more movement in

the US than in the UK so far," says Mr Paul Abberley, head of fixed interest at Lombard Odier in London. But he complains about the lack of specialist mandates from UK pension funds: "It still seems pretty thin."

Much of the overseas band exposure which is evident from the UK pensions industry figures appears to reflect limited allocations by the big balanced managers. There is little evidence that UK pension fund trustees are ready to hire specialist global bond managers. There is a contrast here with

Continental countries such as the Netherlands and Switzerland, where there is at least a trickle of mandates. But in such countries there is a natural inclination to invest in international bonds to diversify hig domestic bond exposures. UK funds, however, would much rather diversify into overseas equities, which account for some 23 per cent of their portfolios.

There's more activity in Europe where people are interested in diversification away from their own small domestic bond markets," says Mr Jon Bailie, who researches bond managers for consultants Frank Russell. "But to begin with, they want to extend elsewhere in Europe rather than

What is the possible appeal of global bonds? First, they have recently been offering attractive, if rather variable, returns. Average annual overseas bond returns in sterling for UK pension funds have ming at 16.6 per cent over the past five years, as good as for UK equities, and with the advantage of adding

But there are two points to note here. One has been the weakness of the pound, which has raised all overseas asset returns. If sterling stabilises in future this attraction will disappear. The other element of the high return has been that the governments of mature countries all over the world have become deficit-ridden and have been forced to issue bonds at almost any price. The risks have therefore risen.

This desperation correponds, on the other side of the balance sheet, to an attractive investment opportunity for blg international institutious, at least so long as the issuing countries are not driven into

the 13 or so governments with high enough investment ratings to figure in the JP Morgan or Salomon Brothers' global government bond indices is likely to run to more than

After the recent back-up in long-term bond interest rates. real vields are running at 4 per cent or more in many countries. This is attractive for long-term investors. On the other hand, the rise in yields has temporarily led to capital losses and, in many cas negative total returns for the first quarter of 1996. The unbedged dollar return

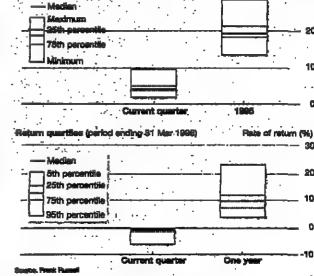
on the Salomon Brothers **World Government Bond Index** was minus 1.9 per cent in the January-March period. The worst markets, such as those of the UK and the Netherlands showed negative returns of more than 3 per cent. The rising volatility of global bond markets has become a

disadvantage. It appears to reflect the periodical intervention of short-term participants like hedge funds and the proprietary trading desks of the big global banks. For British pension funds

there is also a psychological block, in that foreign currency bonds offer no obvious close match to any of their liabilities. This obstacle may be made more formidable by the forthcoming imposition of a minimum funding requirement based only on UK equities and

Active global bond manage ment also involves a lot of currency and yield curve speculation, which clashes with the

Return cuarties (period anding 31 Dec 1995). default. Total net issuance by



Global fixed income portfolios - unhedged

risk-averse approach of the typical pension fund trustee. Meanwhile global bond man-

agers are seeking to adjust to turbulent markets which have penalised those relying on longer-term trends. Many managers picked themselves up last autumn after an unfortunate 18-month period of underperformance against the indices, only to run into turbulence during the winter which, at the extreme, knocked some 13 per cent off the price of the US Treasury long bond. However, flash results for

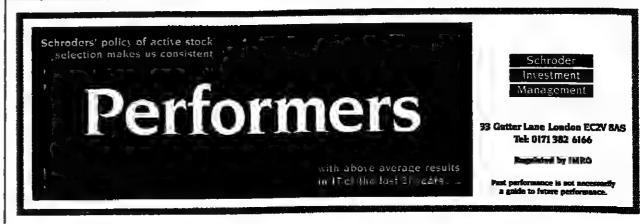
the Frank Russell universe for the first quarter suggest that the median manager has just beaten the benchmark.

Over the past ten years global bond managers have found it fairly easy to beat the indices by adding value in currencies or dabbling in higheryielding corporate or second line government paper. But the risks appear to have increased, and 1994, in particu-

lar, was very difficult. In 1995,

however, according to Frank Russell, the median manager just beat the index returns thanks to a good final quarter. So why global bonds? The they're there." Mr Henry Kaufman, the US-based bond expert, has pointed out that the global bond market has been growing at an average of 14 per cent a year for 25 years. The total of outstanding debt now approaches the equivalent

of \$20,000bn. Pension funds in many countries are seeing the potential of this global pool of bonds. But the risks are not always easy for plan sponsors to understand and accept.



No of individual funds

1955

1002

369 286 206

211

155 122 57

UK managers: by Barry Riley

Leaders pull further ahead

There is little long-term difference between top managers' performances

They do come back. That is a cause for satisfaction for several UK segregated pension fund managers - such as Morgan Grenfell and Prudential Portfolio Managers, where to varying degrees fortunes have revived after bad patches and a source of hope for others, at present under a cloud.

But managing pension funds remains a hazardous business, in which a few winners grab the spoils. There is ever more concentration of business evident in our table of the top 25 managers: the top five this year together control 64 per cent of the funds managed. against 59 per cent a year ago.

The recent takeover of Gartmore by National Westminster Bank will have enhanced this trend, taking Gartmore's expanded operation towards the £30hn mark.

Several smaller managers. however, have suffered substantial business losses, most noticeably Henderson, which saw its funds halved. But maybe clients should have been more patient. As they headed for the exit, Henderson was clocking up one of the best one-year returns in 1996.

Only Morgan Grenfell seems to be making a convincing

Return relative to WM median (% per year)

Segregated fund performance

-		
Performance of segrega	ited funds, to	end 1995
	Over 5 years	Over 1 year
PDFM	+17.0	+16.0
Morgan Grenfell Asset Management	+16.9	+21.5
Gartmore Pension Fund Managers	+16.8	+19.4
Juniter Asset Management	+15.7	+18.7
Schroder Investment Management	+16.6	+19.3
M&G Investment Management	+16.6	+19.2
Clerical Medical Investment Group	+16.5	+19.5
HSBC Asset Management	+16.4	+21.2
CAPS Median	+18.3	+19.6
Prudential Portfolio Managers	+16.1	+21.5
Cacanone	+16.1	+20.9
Henderson Pension Fund Mat	+16.0	+21.4
BZW Investment Management	+15.8	+20.B
Newton Investment Management	- +15.8	+14.1
Fleming Investment Menagement	÷15.7	+20.0
Bering Asset Management	+15.7	+16.1
Invesco	+15.5	+18.6
Threadneedle Asset Management	+15.4	€20.B
Robectsic Austral Management	+15.1	+21.1
Hambros Fund Management	+14.8	+16.2
BZW Barclavs Global Investors	n/a `	+20.4

attempt to catch up with the leading five. It is the star of current beauty contests, with the second-highest growth rate for funds under management bn 1995, at 42 per cent.

The biggest gainer was the quantitative fund management arm of Barclays, now with the inelegant title of BZW Barclays Global Investors. Growth of almost 50 per cent reflected not only the continued adoption by pension fund trustees of lowrisk, low-cost indexation but also the impact of the merger with Wells Fargo's asset manent busine

Perhaps the year's most notable revival was right at

the top of the list, at the industry leader Mercury Asset Management (MAM). Despite the distraction of demerging from its former parent, SG Warburg. it enjoyed a cracking year for investment performance. although as usual it will not disclose any figures. It benefits from the internal restructuring it has under-

Twelve months ago seemed possible that MAM might soon be overtaken in terms of funds under management by its fast-closing rival PDFM, an offshoot of Union Benk of Switzerland. If PDFM

taken in the last two years.

had not suffered a bad year for investment performance it might have got near: its 1995 investment return was probably 5 or 6 per cent points worse than that of MAM, making a difference of more than £2bn to its total pension portfolios by the year-end.

MAM is the first pension fund manager in the UK to have faced the need for a secood-stage restructuring. "Having gone through that process of rejuvenation we are feeling very good," says Mr Colin Clark, director of business

Many other companies have faced the challenge of a firststage reorganisation as they grow from being a boutique to an institution; Newton, for instance, has recently been experiencing this transition. at a much larger size, when the

MAM is the first manager to tackle

second-stage restructuring

manager can no longer deliver almost identical performance to all clients and must re-engineer its approach on a more diversified basis

Six teams within MAM now Three tackie different size bands, starting at £15m. Another team deals with specialist mandates. Two others handle pooled funds and defined contribution schemes

All of them draw on central resources of research and risk control. Performance presumably varies between the teams, but was strong across the house last year, boosted by good stock selection both in the UK and overseas. To give an idea, the £2.5bn pooled fund whose performance is disclosed - returned 21.1 per cent in 1995 against a CAPS median

for this sector of 18.5 per cent. Sometimes performance can be too good. The top position in our live-year performance league table bas become a rather dangerous spot; two years ago Newton reigned supreme but has now suffered

9,146 9,146 7,300 5,906 4,981 4,795 4,606 3,689 3,497 2,311 3,009 2,764 1,999 P,109 M & G Inv Mingt +26.5 +15.6 Junitar Asset Mingt Clerical Medical Inv., Group 2,146 1,981 1,698 1,418 Hambros Fund Mingt 5 Rothschild Asset Mingt 270,275 213,235 +26.7 3,455 Total Pooled pension funds Largest Pooled Funds Elbe Scottish Widows Scottish Equitable 13 5.0 2.5 2.5 Confederation Life Prodential Newton Exampt Fund Schroders U.T. Common Gen Accident Standard Uli-

48,690

44,129

21,547 17,802

11,636 10,830

40.265

34,064

14,382 15,301 8,646 9,800

9,689 8,300 5,253

4,179 4,474

last year's high-flier PDFM siumped in 1995 although it is still narrowly holding off the competition over five years. in a year for fashionable

Mercury Asset Manager

Schooler Investment Most

BZW Bercizys Global Inves

Morgan Grenfell Asset Mingt NatWest Investment Mingt 2

Fleming Investment Mngt

Baillie Gifford

Pruduntial Portices langes

HSBC Asset Management

Newton Investment Mingt BZW Investment Mingt^e

Hin Samuel Investment Mingt3

Sertmore Pension Fund Mngrs

PDFM

growth stocks, value-oriented PDFM was a fish out of water. It was underexposed to equities too because it believes that stock markets are becoming aeriously overpriced. PDFM's investment director

Mr Tony Dye is one of the City of London's biggest bears. Thus the 1996 edition of the company's survey Pension Fund indicators giumly warms ension fund sponsors to allow for the possibility of a future spell of dull returns".

As for Newton, it had a terrible first quarter in 1995, especially in overseas equities. "We've had to tighten up the founder Mr Stewart Newton. who this year has relinquished the chief executive's role and has refocused on his responsi-

social resources in estillid There is more specialisation among Newton's individual managers, and a Quantec risk control system has been adopted. But Mr Newton says scoring a return of 21.5 per medium term, is there a great tility is nowadays controlled there is no reason to change cent, almost 2 percentage deal of difference between by sophisticated risk control the basic approach which produced excellent performance



Top 25 segregated pension fund managers

+20.9

+39.2

+49.8 +16.3

-12.0

+14.7 +3.0

The headquartess of PDFM: the firm's performance drooped in 1985

in any case, Newton is not seeking new pension fund bust-"We don't expect to reopen until we are perceived by the outside world to have got things together," says Mr Newton, He adds that last year's deal with Royal Bank of Scotland, which now has a large minority stake in the company, did not cause the

have delayed the response. Prudential Portfolio Manage ers is much further along the road to recovery, having picked up after bad performance in 1993. In 1995 it shared top spot with Morgan Grenfell, points ahead of the median.

performance problem but may

manager, "We have reviewed the way we put portfolios together to ensure that deviations from the median performance are dampened down," says Mr Rodney Dennis, UK investment head at PPM.

Moreover Prudential ages scope to offer pension fund clients the benefit of its extensive experience as a big life office in modelling assets and liabilities. The trend towards defined contribution structures could also be in the Pru's favour. So the short-term ups and

downs of fortune continue to affect segregated pension fund managers quite strongly. But in the long run, or even the them? Is there a reasonable systems. The hard is still run-The Pru aims to be a "safe" hope of picking a manager that ning strongly.

Pooled pension funds Top 10 returns (5 yrs) 22.7 22.7 18.3 17.7 17.7 17.4 Abbey Life Clasgow Invimt Mgrs Morgan Grenfell Bank of Ireland 17.4 16.8 16.6 16.8

Total funds managed

1995

37.615

57,585

23,576

20,828

30,927 30,600

48,631

70,800

27,800

10,061 8,648

14,032

4,012

7,494 11,869

12,000

613,283

+20.2

+28.8

+28.5

+0.0

+19.0

+98.9

n/a

+14.4

+16.0

+5.8. +17.5

+8.5

+18.9

+30.2

+8.9 -5.8

-1.8

+29.0 #8.7

+49.3

1094

74,000

170,000

24,778

34,155

27,888

65,635

25,600

11,200

9,667

34,653

5,723

14,138

13,368

7,000

29.544

915,498

consistently outperforms? Not according to a study of three-year returns by Mr John Shuttleworth, an actuarial partner at accountants Coopers & Lybrand. The results, be says, are "not kind to the investment managers".

A typical trustee objective is to outperform the median fund by 1 per cent a year over a rolling three-year period. But no manager has consistently achieved this target over the past five years. Only Schröders has achieved even reliable 0.5 per cent outperformance: it had a quiet 1995 in terms of one-year returns, but its track record continues to pull in

large volumes of new business. A feature of the latest fiveyear performance league table is that the leading managers are in fact all tightly bunched. The top four active managers (excluding the disclosure-shy MAM) are confined within a spread of 0.4 per cent in terms

of annualised return. Perhaps this is not surprising, given that asset allocation varies only by tiny margins in most cases (PDFM is an exception) and stock selection vola-

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Gary Brinson US manager

with balance

Mr Gary Brinson's entry into the UK pension fund market is a sign that US-based global munagers are becoming more aggressive. As a start, his company has wen a US specialist brief from the Civil Aviation Authority's pension

Most of the pession fund undate traffic across the Atlantic has so far been from rest to west, as Rejitish investment managers sell their global investment expertise to US clients. But Mr Brinson is one of the newer breed of internationally-oriented US managras.

Brimson Partners was founded in 1981 as a unit of First National Bank of Chicago. After being spun off in 1989 it was absorbed into Swiss Bank Corporation in

US investment managers now have an exploitable opening in the UK pension fund market

April 1995. Under the name SBC Brinson it now runs all SBC's global institutional ment business outside Sultrestand

Worldwide assets totalled \$53bu at the end of last year, and within that the company managed over \$16bn in global partiblies for US institutional clients, making it the largest active manager in this sector. Ralf of the group's total assets are outside the DS.

Brinson Partners - this is still the trading name within the US - is the exception to the rule that globally oriented US managers are usually to be found on the east or west coasts, in Boston or Los Angeles, for example.
"Chicago is a terrific place," insists Mr Drinson. "We're not caught up in the fads and fancies of Wall Street. We can march to the best of our own

But he also maintains offices in six other centres around the slobe, including London. Although strategy is decided centrally in Chicago, SBC Brinson aims to carry out research and analysis as much as possible within local

US-based mana have an exploitable opening in the UK pensions market. The poor performance of London-based managers in US equity stock selection over the years was further mphasised in 1995, when the CAPS median fund in the UK returned nearly 4 percentage points less than the 37.9 per cent index return on Wall

These UK managers also got asset allocation wrong ~ last year they were extremely underweight in Wall Street, which was easily the world's best-performing large stock market. "US equity accounts will be an entry point," says Mr Brinson, who clearly has his eyes on broader global mandates for UK clients

eventually. In fact he is entirely sympathetic to the view that Wall Street is overpriced. But as he points out, "being too early is indistinguishable from being wrong". Brinson Partners' basic

style is that of a multi-market, multi-asset class manager. It offers a global balanced style to its institutional clients, which is rather unusual at this time of increasing specialisation.

"Recently we have shifted



Gary Brinson: he is sympathetic to the view that US is overpriced

money out of equities. especially US equities, into non-US bonds," says Mr Brinson. The firm has also found Brady bonds attractive — more so than equivalent emerging market equities. SBC Brinson is a value

investor which focuses on future cash flows. The assumption is that from time to time market prices and fundamental values get out of

"US investors spend a lot of time investing by looking backwards in the rear-view mirror," says Mr Brinson

"That creates excesses." He adds: "The US equity market overvaluation is now greater than at any time since the summer of 1987. The prospective long-term return on US equities is 7 to 71/2 per cent and investors won't be satisfied with that. The prospective return should be 8% to 9 per cent.

"Equities could go through a period of Jackinsire returns. Or the correction could be violent," he concludes.

Barry Riley

The US: by Maggie Urry

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993

Perplexed by their success

Funds may tinker with their asset allocations to sustain high levels of return

After a year like last one. when the Dow Jones Industrial Average rose by roughly a third, many US pension fund managers are asking: "What do we do for an encore?"

According to Greenwich Associates, the investment management research group, the typical US pension fund had 46.4 per cent of its assets in US equities at the end of 1995, up from 44.8 per ceut a year earlier - a marked shift given the size of the industry, One plan sponsor which contributed to Greenwich Associates' annual survey, put the resulting question thus: "We ave had superior returns should we now make a further change in asset mix?"

Mr John Webster, a Greenwich Associates partner, says "It is incredibly difficult to know what to do after achiev ing a terrific return in the US." One answer is to invest more internationally, a trend which has been apparent for some years among US funds.

Figures from InterSec Research show growth in the proportion of funds invested internationally. Mr Jim Waterman, director of research at InterSec says: "Some funds think international equities present an attractive alternative to domestic", but he adds, the rise in international exposure is "a long term process rather than a tactical one".

However, international investment poses a problem for funds. Mr Webster says. While many are interested in emerging markets, and particularly in Pacific Rim countries, their lack of liquidity and higher risks makes them unsuitable destinations for more than a small amount of funds' assets.

Meanwhile, Japan is a difficult market to assess at present. Europe also raises challenges; some markets are near

DC pensi	on plans (\$bn
Section	1994	18
Corporate		
08	-15.0	-2
DG	+4.8	+
Public		
DB	-3.1	-
DC	+0.3	44

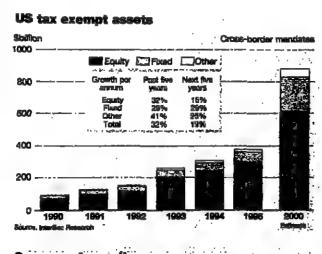
record highs, while rounification still poses problems in Germany,

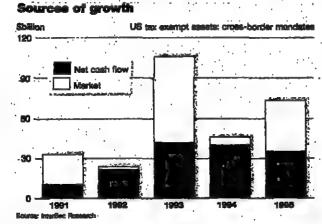
Even so Greenwich Associates found that investors were expecting a 10.5 per cent return a year from their international equity investments. while US equities are forecast to return 9.8 per cent. They expect their asset allocation of international investments to rise over the next three years. while domestic equity w ings are due to fall sligh

Ms Gloria Reeg, head o sulting at Frank Russel pension consultants, say in general funds are changing their asset allow targets, although many looking at how to reba their portfolios in the lig last year's returns. Si they use cashflows to a percentage weightings incur transaction costs in so

reight-	rise in the US equity market	1995 the impact on liabilities
itly.	has been to offset the negative	of lower interest rates was
of con-	effect of lower interest rates	more than offset by an
ll, the	on pension fund solvency.	increase in assets through the
s that	As pension funds use long	rise on Wall Street, although
e not	term interest rates to discount	she warns that final figures
cation	future ilabilities, a fall in	are not yet available.
y are	interest rates actually	Aside from the question of
alance	increases funds' future out-	where to invest their money.
ght of	goings. Thus in 1994, when	plan sponsors are also looking
hould	interest raies rose and bond	hard at the funding basis of
adjust	markets fell, reducing the	pension schemes. The choice is
5, OT	value of funds' fixed income	between defined benefit (DB)

	Net cash	flow to	pensi	on func	lş'	
Sector		1991	1992	1993	1994	1996
Corporate Shn		26.2	39.4	24.9	-10.2	-17.9
as % of assets	5	-2.4	-2.6	-2.0	-0.6	-1,4
Public Sbn		13.4	+6.2	-5.7	-2.7	-4.€
as % of assets	3	+0.5	+0.5	-0.5	-0.4	-0.3





ing assets from an area where

they are now overweight? One beneficial effect of the

ist or ot-	marke value	t rates ts fell, of funds solver	reducit ' fixed	g the	1			
w to pension funds'								
91	1992	1993	1994	1996*	1			
	-				i			

between defined benefit (DB) plans, where pension levels are fixed according to a pre-set formula, and contributions have to be made to meet these liabilities, and defined contribution (DC) funds, where contributions are fixed and the final level of pensions depends on investment performance.

because liabilities dropped by

195 the impact on liabilities

re than asset prices.

The latter type continues to attract more money. Indeed, as the Greenwich Associates survey found, while DB plans as a whole are seeing a net cash outflow as benefit payments exceed contributions, DC plans are still enjoying positive net cash flows.

However, plan sponsors are increasingly concerned about ducating members of DC plans to make wise choices. They can choose where their money is invested and can dip into their "savings" before retirement. Both freedoms can lead to poor choices being made, seriously depleting the final level of pensions. While most experts believe

that equities offer the best long term returns, some ees prefer the "safety" of fixed interest investments. To counter this, many plan sponsors are now offering so-called lifestyle funds. These take into account an employse's age and expected retire-ment date and adjust the port-

Over the life of the fund the asset allocation is changed gradually, becoming safer as its members age. Younger bers contribute to a fund with a more aggressive approach, while the investare more conservative. The other worry - that

employees will take money out too early - can be counter by more education.

Japan: by Gerard Baker

The elderly are expensive

Liberalising the pension fund market will not forestall a cash crisis

Few countries face a pensions crunch on the scale of Japan's. Not only does the nation have a rapidly ageing population, soon set to put a heavy burden on public and private sector cension fund finances, but the financial chaos of the last few years has cut deep into the Ms Reeg estimates that in returns actually achieved by those funds. Add to that a panoply of regulations that restrict the efficiency of the country's pensions market, and you have ise on Wall Street, although the makings of a real crisis.

But there are signs that the authorities have recognised the gravity of the problem. The opening of the country's financial markets are the route they have chosen to ease the pressure on the system.

Japan's arrangements for retirement provision are characteristically complex. All employees, private and public sector, pay a flat sum into the national pension scheme. Most of them also pay a higher earnings-related element into another state-run fund. This figure is currently 16.5 per cent of salary, split evenly between employee and employer.

But since that figure is still expected to produce a pension of roughly just 45 per cent of final salary for most employees, a growing number are now also covered by company plans, again paid for jointly by employer and employee.

Japanese pension funds are worth about Y190,000bn (\$1,759bn) in all, of which nearly three-quarters by value are held by the public sector.

In the next two decades, the demand for these funds is set to grow at a pace way beyond their capacity to meet it. A combination of radical demographic changes and poor investments have put Japan's pensions system in a vice.

The most pressing problem is the familiar one of an ageing population. Within twenty years the proportion of pensioners within Japan's popula tion will have risen from under 15 per cent to 25 per cent. The burden on today's workforce is growing heavier. According to research by Goldman Sachs, the US investment bank, while today's pensioners are likely to receive total pension payments of over four times the sum of their contributions made in their working lives, workers in their twenties will actually have to pay more in contributions during their careers than they will receive in pension

The government has belat-



edly begun to increase mandatory contribution rates for employers and employees in the supplementary pension schemes, with the aim of meeting this requirement. But even these changes are unlikely to suffice, because the demographic problem has been compounded by poor investments.

Most pension fund assets are entrusted to life insurers and trust banks to invest. Over the last five years the returns achieved by these managers have been hit hard by the long financial slump. In the late 1980s they invested in all sorts of risky assets. Their clients have paid the penalty since.

For example in the 1980s life assurance companies promised reforms to their investors well above the yield on the benchmark 10-year government bond. They felt confident of their ability to meet these guarantees because they were securing big capital gains on their other assets.

But at the start of the 1990s they were hit by an unprecedented but not unforce series of blows: the stock mar-

Japani 10 year government bond

ket collapsed; land prices plummeted, the yen rose sharply; and interest rates began to fall. Within a few years life assurers were no longer able to achieve the yields promised, but initially they continued to guarantee them nonetheless. Only as the recession deepened three years ago did the life companies belatedly begin to cut their guaranteed yields .

In a normal market pension funds would have moved their assets to more successful managers as returns began to slide. But Japan is different. A tough regulatory system ensured that the life companies and the trust banks enjoyed a virtual duopoly in asset management.

In 1985 some outsiders including several foreign trust banks - were permitted to compete for business from the private sector. But the market share gained by these outsiders was small.

As the returns achieved by established managers fell, the pressure for change intensified. Japanese public sector fund managers in particular looked

on in horror as their funds beld captive by the life companies and trust banks, underperformed world markets. Between 1990 and 1993, the average pension fund in the US achieved a compound yield of over 50 per cent, but in Japan the figure was 10 per cent.

Two years ago, acutely aware of the long-term demo-graphic time-bomb, the authorities decided to act. They agreed to open up much more of the market to outsiders.

The biggest changes were made to the management of public sector pension funds. Nempuku, the Japanese body responsible for allocating up to \$200bn in funds collected from national pension contributions was the focus of the change. Until a few years ago all these funds were entrusted to the life companies and trust banks. Now the entire fund is open to all comers, and US investment advisars have already moved in, taking some big contracts.

The other big reform has been to allow corporate pension funds to hire foreign investment managers, a change that is already begin ning to bear fruit. In the last year more than twenty big Japanese companies have allocated part of their pension funds to foreign managers for the first time.

Nevertheless only a relatively small proportion of the total market can be described as commonly open. And regulations governing the operation of such funds continue to limit pension funds' potential TANDEL TON

But most foreigners believe the changes now in place have ushered in a revolution whose biggest beneficiaries will be the ever-expanding ranks of future Japanese pensioners.

■ Continental Europe: by Peta Hodge

Governments beat a slow retreat

The EU is inching reluctantly towards introducing more private sector pension provision

Pre-funded private sector pension provision in Europe is poised for growth. The mix of state provision and unfunded private pension promises that currently dominate will become increasingly unsustainable as the ratio of Densioners to workers continues to

So far the growth of privatesector pension provision in Europe has been unspectacular. Tax regimes are generally not designed to encourage the establishment of private funded schemes, and governments which seek to reduce state provision face considerable opposition - particularly in countries where dependence on state pensions is high.

As a recent FT management report, Pension Fund Investment in Europe, points out, in the UK, where the average state pension is worth less than 30 per cent of average pay: "The government's systematic reduction in the level of the state pension until very recently met with barely a murmur of protest. In Italy. however, where state pensions account for almost two-thirds of pensioners' average earnings, proposals for similar reforms met with mass demonstrations and threats of a

national strike. Opponents of change also fear that a switch from state to private provision will increase indirect labour costs and fuel

unemployment. Although European governments seem united in their desire to shed some of their pensions burdens, there is little homogeneity in their proposals for the future. Nor is there any uniformity in current practice. Whereas France and Italy have virtually no private sector pension funds, the value of pension assets in the



ns are provided using book reserves, a system France may also adopt Netherlands and Switzerland

already exceeds their GDP. The UK has the largest pension fund sector in Europe. According to the recent FT report, UK funds accounted for around 60 per cent of Europe's \$1,450bn in pension fund assets at the end of 1994.

The UK also has the most established pensions advice industry in Europe, which sees itself as the natural beneficiary of an expanding European pen sions market. What many UK investment managers, consultants and performance measurers are already beginning to realise however, is that the rest of Europe will not necessarily adopt the same methods as the UK for expanding pri-

vate provision. In France, for example, there is considerable interest in covering pension liabilities through book reserves in the balance sheet of employers. rather than building up separate funds. Book reserves have generally proved to be a very effective in Germany where they are worth some DM300bn (\$198bn).

Even if a majority of Euro

pean governments were to ont for a system of fully-funded private pension provision, it would be unlikely to greatly boost demand for foreign assets. According to figures from consultants William M Mercer, the average pension fund in Denmark, Finland, Germany, Portugal and Spain, has more than three-quarters of its money in domestic assets, which are mainly bonds.

This bias towards domestic

bonds is partly attributable to the investment restrictions which still exist in many countrles. The European Commission would like to remove these, believing that more overseas investment would allow pension fund assets to boost capital growth. But it faces entrenched opposition in many countries. A report by the European Federation of Retirement Provision (EFRP). to be published later this year. is expected to argue that employers' costs could be reduced substantially if greater investment freedom allowed pension funds to achieve enhanced returns.

The barriers to better investment performance are not just legal ones. Many European pension funds fail to take full advantage of the limited investment freedoms already available to them. There are a number of possible reasons for this, says Mr Koen de Ryck of the EFRP, including cultural bias and risk averseness. "It is not always possible to get better performance from outside the domestic market." he adds. 'in the Netherlands some money managers have had a poor experience from diversification, and we have seen the same situation in Belgium and Switzerland. Diversification

Even so, European pension funds are expected to become more international in their investment outlook. That does not mean that UK investment managers can expect new business to fall into their laps. "The market is becoming increasingly competitive," suggests Mr de Ryck. "The Americans are moving in with enormous capacity and different services and Germany is

reduces risk but doesn't neces-

sarily improve returns."

₽.

tion of investment managers by German banks." To be successful in the wider European market, UK manag-

ers must be prepared to tailor their products. Analysts expect that many of the new pensions schemes that will be set up in the next few years will be established on a defined contribution (DC) basis, rather than on the defined benefits (DB) basis once popular with employers in the UK. In DB schemes the employer bears the risk of investment underperformance, but it is carried by the scheme member in a DC scheme. This dictates a different role for the investment manager (see article on p5). In the UK, pooled arrange-

ments are mainly used by smaller funds where segregated management is not deemed cost effective. In other parts of Europe funds of all sizes are happy to use collective investments. European funds, which do not share UK counterparts' long history of active management, are also more prepared to consider using methods of investment in which computers sift big volumes of data in search of

Ms Julia Hobart of consultants William M Mercer warns against reading too much into apparent trends however particularly in such an immature and rapidly changing market. "This may be more of a client thing than a country thing," she suggests. "Large funds in most established markets tend to have quite a lot in common." she says.

On the whole, Ms Hobart believes the prospects for UK investment managers in continental Europe are fairly good. "Domestic managers often get the largest proportion of assets," she says. "But when looking for specialist management outside their domestic markets, pension funds have tended to favour UK managers. Ultimately selection boils down to quality and whether a manager has the necessary skills."

Pension Fund Investment in Europe

Debbie Harrison

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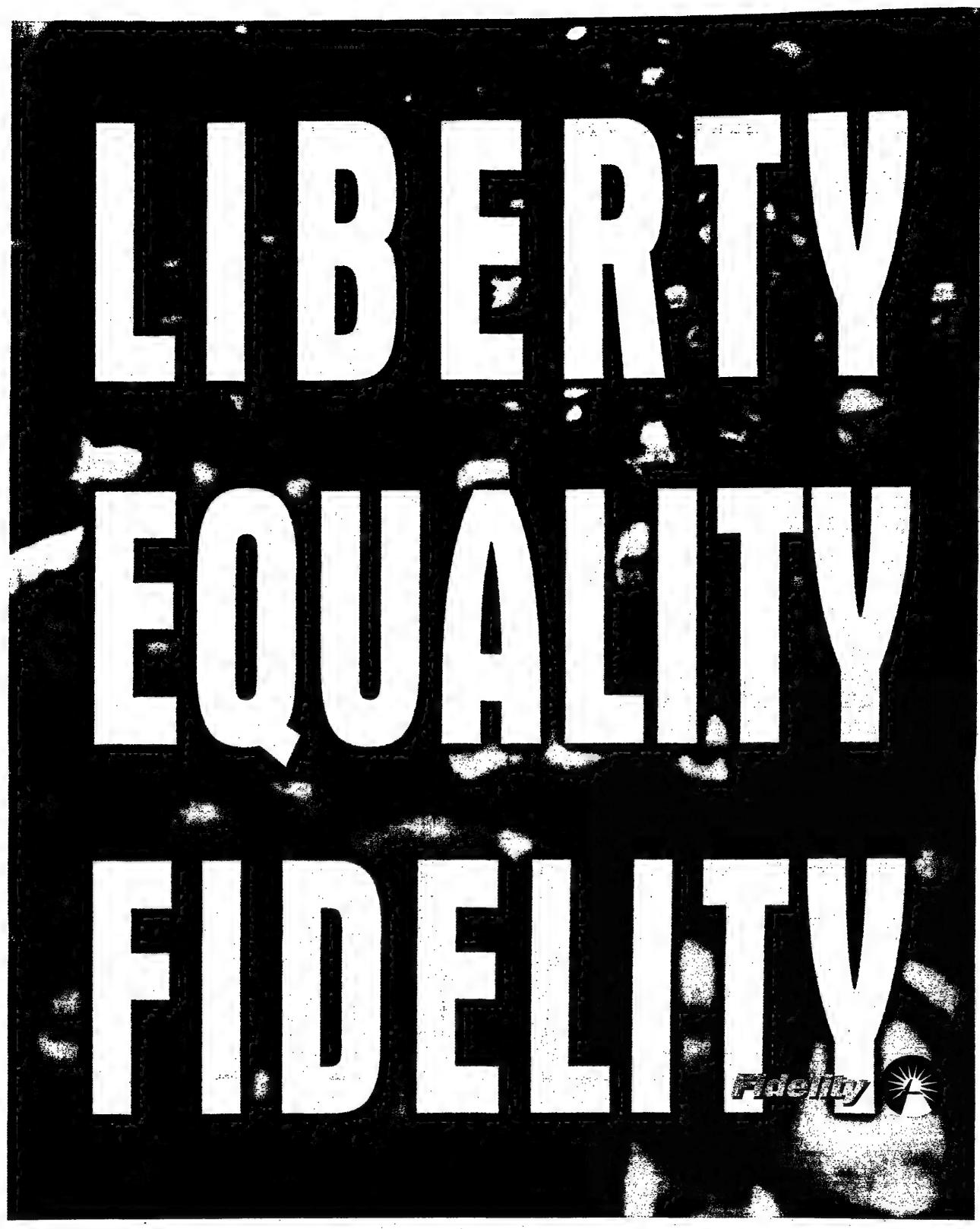
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MARKETS REPORT

Nervousness about heavy

It fell to \$1.4928 before recov-

den at \$1.4965, from \$1.5006.

Sterling also lost ground against the D-Mark, finishing

at DM2.295, from DM2.3012. The trade weighted index fell

to 83.5, from 83.8. It remains

some way above the historic

low of 82.2 recorded last

The dollar turned in a

following recent weakness, at

Y105.115, from Y104.755, It was

Volumes were fairly thin on

account of many European

markets being closed for May Day. The D-Mark was generally slightly firmer, although the

lira did at one point rally to an

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CROSS RATES AND DERIVATIVES

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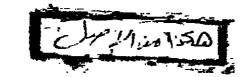
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By Philip Gawith

against the dollar.



URSDAY MAY 2 1996

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Election worries push sterling to two year low 15 month high, at L1,016, says: Despite the fact that before closing at L1,021. The South African rand traded steadily again, finishing government losses in today's local elections yesterday saw at R4.33 against the dollar, sterling fall to a two year low from R4.3225. South African markets were also closed.

ering slightly to finish in Lon-■ Although sterling's fall was due largely to politics, it also contained a technical element, with the \$1.5050 level being an important one. Analysts were fairly sanguine about the drop. They pointed out that a correction had been overdue, considering sterling's surprising recent strength, taking into account the government's fragile majority.

steadier performance, finishing slightly firmer against the yen, There are a number of concerns surrounding sterling. Mr Kit Juckes, currency analyst at NatWest Markes in London, unchanged against the D-Mark

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consumer demand is showing signs of picking up, calls for lower interest rates and even lower tax rates, later this year, remain. Gilts offer attractive yield pick-up relative to some European markets, but certainly not relative to Trea-

He continues: "A pick-up in domestic consumption at a time when demand in the UK's major export markets remains virtually moribund, bodes ill for the balance of payments in the months ahead." With the political backdrop added in, he said a conclusive break below \$1.50 was "only a matter of Mr Brian Martin, economist at Barclays in London, said he

Mr Joe Prendergast, currency strategist at Merrill Lynch in London, said the fact that sterling had fallen against

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did not expect any sell-off to be

too rapid, "There is reasonable

buying interest at lower lev-

both the dollar and the D-Mark showed that there were "specific sterling concerns in the market." But he said the depth of market pessimism was already so great as to offer protection against anything but the very worst election out-

m Despite the dollar's recent losses against the yen, there

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evidence of dollar strength.
This view received some sup-

CURRENCIES AND MONEY

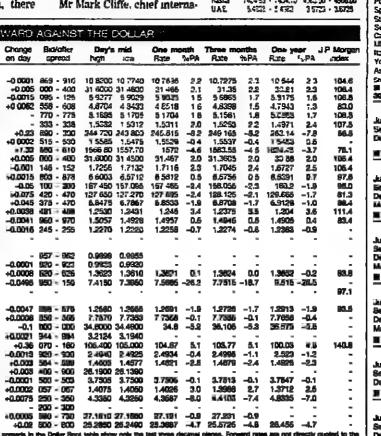
have been some indications in Europe which testify to independent dollar strength, and not simply D-Mark weakness. Mr Prendergast cated the dollar's breach of SFr1.24 against the Swiss franc, the equivalent of DM1.50 against the D-Mark, the resilience indicated by the dollar's bounce against the ven; and the breach of FFr5.18. against the French franc, as

port from Mr Brian Marber, an independent technical analyst, who is predicting good things for the dollar against the Swiss franc, French franc and D-Mark in May, He is also opti-mistic against the yen: "Since there is no sign of any toppingout process in dollar D-Mark, the likelihood of the dollar heading south against the yen for very long from current levels, while heading in the opposite direction against D-Mark

very small." Mr Mark Cliffe, chief interna tional economist at HSBC Markets, said the market remained puzzled about the direction o the dollar yen rate. "Speculation about higher Japanese rates is premature, but that kind of speculation is difficult to dispel while we keep getting indications of a pick-up in Jap anese economic activity.

The dollar received a fillip from Mr Yasuo Matsushita, the governor of the Bank of Japan, who said the current account environment was not conducive to further yen appreciation. The market took this as confirmation that the BOJ would not sanction indefinite yen apprectation, but there was some doubt as to whether verbal intervention alone

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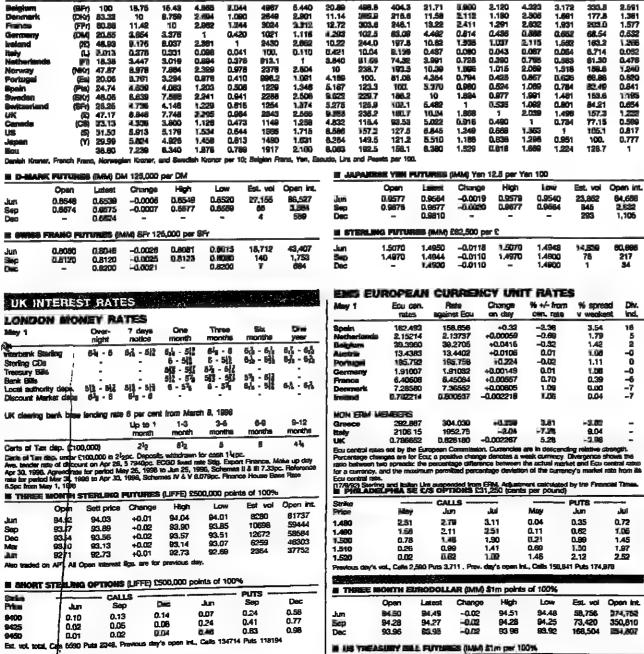
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WORLD INTEREST RATES



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All Open interest figs. are for previous day

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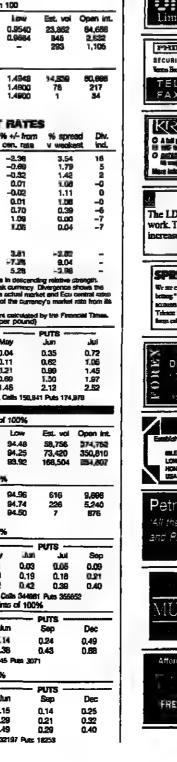
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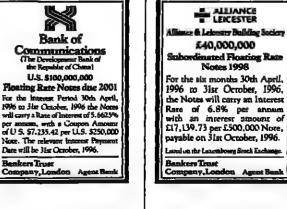
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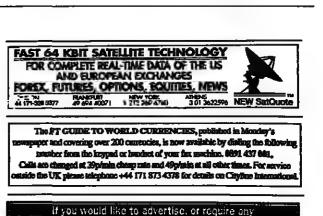


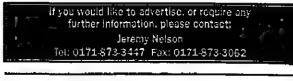
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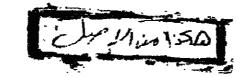
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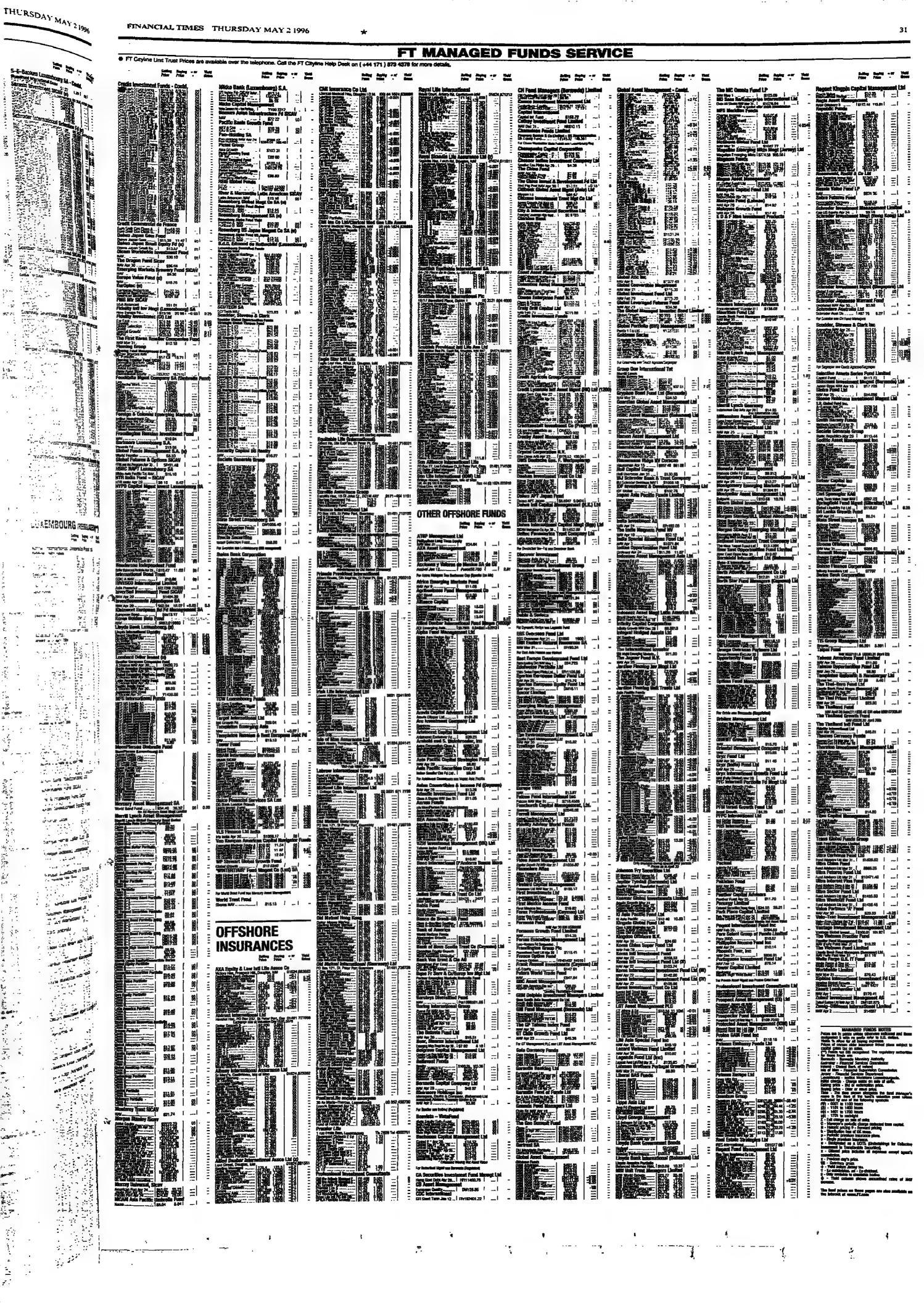
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LONDON STOCK EXCHANGE

BARKET REPORT

Struggling Footsie takes another look at 3,800

By Steve Thompson, UK Stock Market Editor

The closure of much of continental Europe for the May Day holiday, plus the impending UK local elections and US non-farm payroll report for April, made for a quiet trading session in UK equities.

But it was the lack of any of the much heralded takeover activity that continued to take its toll on the market.

The FT-SE 100 index took a couple of hard looks at the 3,800 level, but always rallied well and eventually finished the day a net 11.9 off at

Second-line stocks, which have

left the leaders well behind since the start of the year, lost more of their shine, with the FT-SE Mid 250 index posting its third consecutive retreat and ending the day 11.7 down at 4,540.1.

A handful of profits warnings. notably from Courtaulds Textiles and General Accident, the composite insurer, gnawed away at the market's confidence, as did some more downbeat economic news, in the form of the Purchasing Manager Index for April. The index fell for the third month running.

The news from across the Atlantic, where the National Association of Purchasing Management published their survey for April, initially depressed Wall Street, where the Dow Jones Industrial Average came under pressure. But sentiment there quickly picked up and the Dow was showing a 20-point-plus gain an hour after London closed

The NAPM details saw US Treasury bonds move up sharply after a difficult start, helping UK gilts to end the day virtually unchanged, in spite of the pressure on the pound. Commenting on the day's events in the market, the head trader at one European broking house said sentiment in London remained fragile. "The market expects the Conservatives to get a tanning in the elections and is looking for a fur-

bers in the US, but it is a question of how much in both cases.

On the elections he said the market would probably cope quite happily with losses of up to 800 local council seats, but that many more than that would trigger renewed and damaging stories about Mr Major's leadership into the general election.

Turnover in equities at 6pm reached 790.4m shares, a figure that surprised dealers but which was heavily weighted to non-FT-SE 100 stocks that accounted for more than 60 per cent of the day's business. And there was plenty of activity in the market's "penny stocks".

Around the individual sectors the composite insurers provided plenty of interest, with General Accident hard hit by the warning that profits would be badly affected by the weather which hit the company's main markets, the UK and North

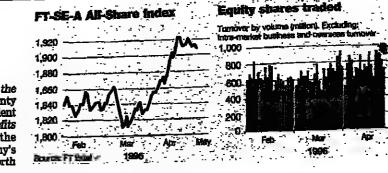
America, over the winter. The day's biggest casualty was Courtaulds Textiles, which plummeted more than 10 per cent in the wake of the shock profits warning. The utilities areas, on which many speculators had pinned high hopes of more takeover bids devel-

oping this week, were given a maul-

ing. Some market observers main-

tained, however, that fresh takeover

action is imminent.



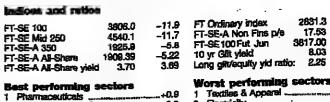


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Other Financial



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TRADING VOLUME

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Grid mystery deepens

The mystery over Hanson's sale of 210m shares in National Grid deepened yesterday as a buyer failed to materialise.

Early speculation suggested that HSBC James Capel, which took on the 12.5 per cent stake at 192.50 a share in the form of a bought deal, had a buyer lined up but lost it at the last

However, an announcement late on that Capel had hedged its risk with a subsidiary of Olayan Group, an Athensbased investment group, sparked a rumour that Hanson had not rid itself of the shares

et all. Dealers suggested that the international conglomerate may have sold the stock with an option to repurchase. This would enable it to raise £405m in order to reduce its debt. And it would have allowed Hanson to benefit from any bid-related

buying in the future. Flesh was added to the bare bones of the rumour by a link between Olayan and Hanson. Mr Niven Duncan, a non-executive director of Olayan, was until September last year a director of Eastern Group, the regional electricity company which Hanson took over. However. Eastern said the link was purely coincidental and Hanson said it had no option to

Late yesterday, National Grid said Capel held 12.2 per cent of Grid shares, suggesting to some that it might have taken and sold 0.3 per cent of the company as commission for the deal. National Grid shares ended the day 51/2 lower on turnover of 6.5m, while

Builders retreat

Hanson hardened to 1971/sp.

Kleinwort Benson turned less positive on housebuilding shares, sparking a minor ahakeout for the sub-sector. Housebuilders have had a

strong run this year, with Barratt outpacing the market as a whole by 14 per cent over the past month and Beazer notching up 10 per cent relative growth Kleinwort moved from overweight to neutral and provoked clear profit-taking.

Both Barratt and Beazer retreated more than 2 per cent. The former came off 6% to 263p and Beazer ended 5 lower at 204p in 4.4m traded. Wilson Bowden shed 8 to 455p.

Courtaulds hit

Hard pressed textile analysts were left shell-shocked by the latest announcement from Courtaulds Textiles.

Just when they were begin ning to think that the sheen might be about to return to the sector after a period of savage downgrades and heavy destocking, Courtaulds issued a profits warning. The company said its losses in its US operations would drag down group profits in the first half. Analysts expect profit estimates for the current year to

be cut to between £40m and £41m from £47m previously. Courtaulds Textiles shares tumbled 45 to 378p, while Coats Viyella relinquished 7 at 185p.

Rank ahead

Shares in Rank Organisation moved against the poor market trend, adding another 6% at 539%p on brisk buying following Tuesday's lunch with a number of influential brokers, the first of three this week hosted by the group's new chief executive.

One broker who attended the meeting said: "The tone was upbeat and positive, though it has to be said that we shall have to wait until the interim figures in August to get the full picture,"

Volume yesterday rose to 6.2m shares, with Henderson Crosthwaite said to have accounted for a large slice of the day's trading.

The market was bracing itself for a poor set of interim figures today from food retailing group Kwik Save. Nervous trading left the shares trailing 5 at 468p. Dealers said they

expect profits to fall by between 20 per cent and 27 per cent to about £45m, and one analyst added: "Let us just say few people expect the company results to surprise on the unside."

The general feeling in the market remains that Kwik Save has continued to lose market share to the superstores and that margins at the group remain under pressure. The food retailer is expected to report a decline in like-forlike sales. Talk in the market also suggested that the company is experiencing difficulties in the distribution of its

fresh products. Transport leader P&O outmanoeuvred the market trend, hardening 3 to 535p on hopes for improved cross-Channel ferry margins should the group manage to negotiate a merger with Swedish rival Stena. Between them P&O and

Stena operate nine of the dozen FINANCIAL THES EQUITY INDICES

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B2 Week highe and love. LITTE Ecolor college short-haul Channel ferries. According to one London analyst, a merger could see combined capacity go down by between two or three ferries.

Glazo Wellcome continued its recovery with an advance of 12 to \$180 as a recent product approval gave some counterbalance to worries over Zantac, the company's key anti-ulcer product SmithKline Beecham ended

13 higher at 717%p in response to an upbeat presentation to analysts in Belgium about its vaccines business and optimism that the US Food and Drug Administration would this week approve Kredex, its

heart drug. National Westminster Bank rose 7 to 619%p as some brokers reacted to the cost savings which should be generated by the bank's announcement that it will reduce its branch network by 15 per cent. ABN Amro Hoare Govett moved its stance on the stock to hold from overvalued and apparently set a 650p target price.

Kingfisher dropped 10 to 585p after a marketmaker was left holding a large line of stock and other marketmakers marked the price down.
W.H. Smith firmed 5 to 500p with renewed interest from buvers anticipating the group's

mouth. One analyst speculated on the possibility of a rights News of slowing demand and a big share placing left Kurodis Electron trailing by more than

strategic review, due this

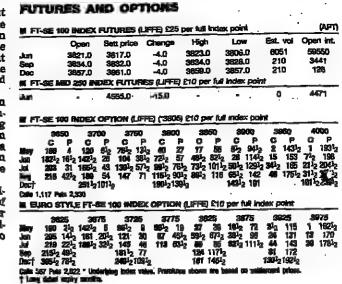
17 per cent. The announcement that Swiss utility Elektrowatt was to place its 40 per cent share-holding in Eurodis with instiintions dashed market hopes for a hid for the electronic components supplier. The shares came off 49 to 233p.

MMT Computing jumped 88 to 458p following a strong interim profits statement. In the drinks sector, Allied Domecq gave up 12% to 501p following the announcement that the group had lost the agency rights for Lanson champagne, a high profile brand. One analyst said that while Allied was playing the loss down, the market adopted

a much more bearish stance. Water stocks dipped on drought worries and unconfirmed talk that SBC Warburg had placed 2.5m shares in Yorkshire Water at 660p a share for one institution keen to lighten its load. Yorkshire

fell 15 to 658p. in the electricity sector, Midlands fell 10 to 380p in spite of late whispers that a US buyer was preparing to pounce following the government's veto of the bid by PowerGen.

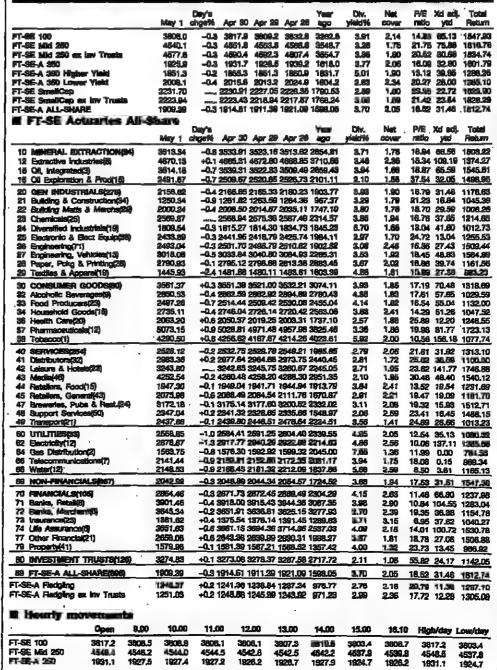
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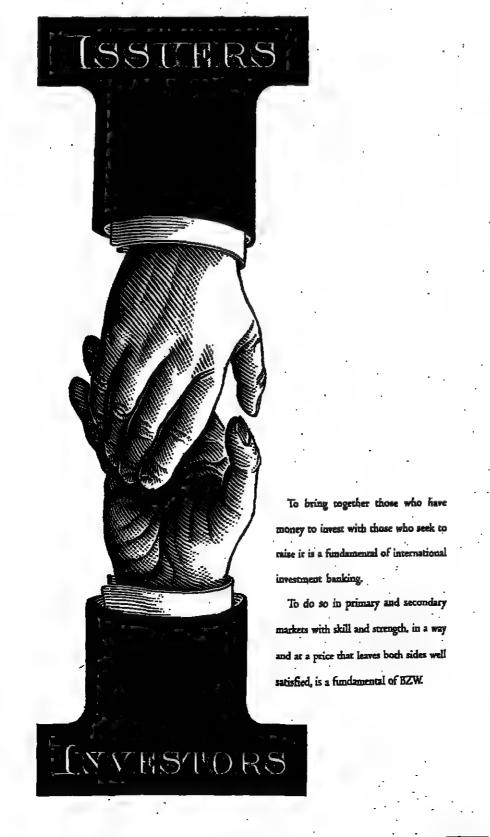
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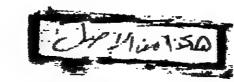
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Hand delivery services are available for subscribers in the centres of Baden, Basel, Bern, Biel/Bienne, Fribourg, WPP ADR Genève, Lausanne, Lugano, Luzem, Montreux, Neuchâtel, St Gallen, Vevey, Winterthur, Zug/Baar, and Zurich plus Wyman-Gdn 0.40 28 2021 1834 18 185₂ +1₂ Proof Ops 0.28 38 57 34 33²4 33²4 3²4 2²2 2²7 45²2 2²7 2² 2220000 3132 2978 3074 -114 DSC Çar over 100 other towns and villages throughout the country. Please call 155 23 83 (Toll Free) for more information. - K -

WORLD STOCK MARKETS

Technology stocks push Nasdaq forward

Wall Street

Technology shares in the Nasdaq composite continued their upward streak in midsession trading yesterday, while other sectors posted more modest gains as the bond market strengthened, writes Lisa Bransten in New York.

At 1 pm the technology-rich Nasdaq composite was well on its way to a tenth consecutive record close with a gain of 8.95 at 1,199.47. The Pacific Stock Exchange composite added 1.1

Leading the charge were Internet related stocks that got a boost on Tuesday from news that MFS Communications, a US specialty telecommunications company, and UUNet Technologies, an Internet access provider, had agreed to merge. UUNet, which rose more than \$10 on Tuesday, added \$4% or 7 per cent, bringing the shares to \$63.

Other Internet access companies also posted a second day of gains. PSINet rose \$2% or 16

MATTOWAL AND

Australe (80) Austria (25) -Belgium (31) Brazil (25) ---Caneda (99)

Hong Kong (56 Ireland (16).....

Europe Ex. UK (516) Pacific Ex. Jepen (35

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Non-Financial Financial Gro All-Share

Eurotrack 100

Ordinary

FT-SE 100 FT-SE Mid 250 FT-SE 350

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Eurotrack 200 FT/S&P-A World Index

FT Excess
Government Securities
Fixed Interest

REGIONAL MARKETS

On-Line Communication Ser-

American Stock Exchange/Interactive Week index of Internet-related liesues gained 1.3 per cent in early

Gains were more modest on the Dow Jones Industrial Average and other, broader indices. At 1 nm the Dow was up 25.29 at 5,594.37, the Standard & Poor's 500 put on 2.21 at 656.38 and the American Stock Exchange composite climbed 2.94 to 593.84. Volume on the NYSE came to 238m shares.

Bonds were supporting the equity market as they reversed some of the week's losses in spite of a gain in the National Association of Purchasing Management's figure on manu-

facturing activity.
Chrysler added \$% at \$63% after announcing car sales figures that showed a continuation of its strong start this vear. Car sales advanced 22 per cent and light truck sales were 40 per cent higher. Those

cent to \$16% and NetComm results stand in stark contrast to a poor start for the car market made last year.

Uniroyal Chemical moved up \$2% or 23 per cent to \$14% on news that it had agreed to merge with Crompton & Knowles for about \$15 a share in stock. Crompton & Knowles

added \$\% at \$15\%. Discreet Logic lost more than 40 per cent of its market value as the shares plunged \$611 to \$911 after the video effects company said it expected to turn in a "significant" loss in the third quarter.

Toronto was modestly higher in midsession trading, with the TSE-300 composite index up

13.59 at 5,160.06. Most of the 14 sub-groups were higher, with the golds group leading the advance, up arly 1 per cent. Real estate stocks had made 0.8 per cent and the transportation group was up 0.5 per cent. Energy shares were going in the other direction, off 0.6 per cent.

EM	EROUNG I	MAPROCETS:	IFC WEE	KTA DUAS	TABLE PRIC	EMDICE	ş.
			Dollar terms	1		ocal currency	
Market	No. of atocks	Apr. 26 1996	% Change over week	% Change on Dec '95	Apr. 26 1996	% Change over weck	
Latin America	(247)	818.34	+0.1	+8.9			
Argentine	(31)	878.93	+0.8	+9.7	538,919.75	+0.6	+9.7
Brazil	(68)	333.86	-0.4	+9.4	1,239.30	-0.3	+11.6
Chile	(43)	784.08	+1.7	-1.9	1,193.79	+1.5	-2.1
Colombia ¹	(19)	631.30	+5.2	+5.8	1,179.15	+5.3	+12.4
Mexico	(86)	539.02	-1.8	+18.9	1,717.70	-2.0	+14.1
Peru*	(20)	211.75	+5.1	+7.4	307.44	+5.4	+10,7
Venezuele ^s	(5)	485.47	+0.2	+45.2	5,218.95	+0.3	+99.9
Asia	(631)	271.67	+0.6	+17.0			
Chine ⁴	(23)	57.13	-1.0	+5.6	60.06	-1.0	+6.7
South Koreas	(145)	135.75	+1.1	+7.8	139.01	+1,1	+8.3
Philippines	(35)	287.19	+1.2	+10.6	363.06	+1.2	+10.4
Talwan, Chine	(83)	138.65	+1.2	+22.9	141.52	+1.3	+22.5
India"	(76)	105.80	+1.9	+31.7	128.50	+1.9	+28.0
incionesis*	(44)	129.35	-0.1	+17.9	163.60	-0.1	+20.1
Malaysia	(123)	327.97	+0.7	+21.0	301.80	+0.6	+18.8
Pakistan ^e	(25)	264.11	+5.9	+8.8+	417.95	+6.2	+10.9
Bri Lanka*	(5)	. 111.24	-2.0	+6.9	132.20	-1.8	+8,4
Thailand	(72)	374.41	-1.8	-0.4	375.84	-1.8	-0.0
Buro/Mid Best	(236)	142.94	-22	+0.9			
Greece	(47)	242.16	-4.7	+0.8	398.73	4.0	+3.0
Hungary ^a	(8)	149.02	+1.1	+51.4	. 265.58	+2.8	+64.1
Jordan	(8)	178.01	-1.0	-3.6	265.74	-1.0	-8.6
Poland [®]	(22)	644.88	+9.4	+61.3	1,077.81	+8.5	+82.7
Portugal	(26)	121.80	-2.0	+5.0	130.78	-0.8	+10.0
Bouth Africa ^s	(63)	238.45	-2.8	-7.6	217.62	+0.7	+12.0
Turkey ¹⁴	(54)	148.74	-0.6	+42.3	5.213.88	+0.1	+74.4
Zimbabwe ^s	(5)	955.00	+1.8	+29.3	514.44	+1.7	+56.4

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MONTHLY AVERAGES OF STOCK INDICES

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Highest close Apr

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Notice of Interest Rate

The United Mexican States

Collateralized Floating Rate Bonds Due 2019

NOTICE IS HEREBY GIVEN that the interest rates of

Rate TIRD Discount Series & 6,2800825 PCT PA. SBLOR TIRD Per URD 1,000

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EUROPE Dutch shares higher

With most of the Continent's markets closed for the May Day holiday, attention moved to AMSTERDAM, where the market nudged to yet another record high as dollar strength

supported equities. The AEX index rose 1.12 to 555.72, and also struck an intraday high of 556.94 before profittaking took hold.

The financials were popular, with ING and ABN Amro pulling the market along with them. The stocks improved a respective FI 1.50 and FI 1.20 to FI 133.80 and FI 89.90.

Trade was fairly light and many brokers were awaiting first-quarter results from Uni-lever and DSM today. DSM ed F13 to F1172.

COPENHAGEN was lifted by good trade in Sophus Berendsen and the stronger dollar. However, many analysts thought profit-taking was now in store in the days ahead. The KFX 20 index gained 0.48 at 114.30 in turnover of DKr806m. A firmer dollar helped to push the index higher, with A.P. Moeller's D/S 1912 and D/S Svendborg both rising DKrI,000 to a respective DKr131,000 and DKr188,000. Sophus Berendsen climbed DKr15 to DKr739. Tele Dan-

mark lost DKr13 to DKr284 in 128,000 shares traded. TEL AVIV moved sideways as investors waited for the May 29 elections. The Mishtanim index edged up 0.14 to 204.16 in

turnover of only Shk61m. The most active stock was Eitte Industries, which surged 4.7 per cent to Shk1,165 on turnover of just Shk3.8m. Elite reported a net loss in the last quarter of 1995 of Shk47.2m. against a deficit of Shk3.1m a year earlier. Traders said that the loss was the result of a one-time charge and they expected the company to publish improved results in 1996.

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on Wednesday, May 22

This survey will be an overview of Jersey, providing a

together with in-depth comment on key areas such as

Patricia Olefs

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Nikkei declines below 22,000

Uncertainty over the course of the yen weighed on investor sentiment, and the Nikkei average declined 1 per cent. falling below the 22,000 level for the first time in seven trading days, writes Emiko Tera-zono in Tokyo.

The Nikkei 225 index receded 226,29 to 21,815.01 after moving between 21,772.71 and 22,087.32. The index closed below 22,000 for the first time since April 19 on selling triggered by a fall in futures prices. Bargain hunting by domestic institutions provided some support for the index, but their purchases remained limited ahead of the five-day weekend starting

IDHOLLOW. Volume was 447m shares, against 402m. Technical trad-ing dominated activity as most domestic and foreign investors remained inactive. Investment trusts actively placed indexlinked sell orders, while individual investors traded specu-

The Topix index of all first section stocks fell 14.81 to 1,697.61 and the Nikkei 300 index gave up 3.17 to 313.79. Declines led advances by 696 to 386, with 142 issues unchanged. Dealers sold futures positions to cut their losses. Arbitrage sales linked to the Topix

index mounted in the afternoon as the Topix based futures market fell below the underlying cash index. In London the ISE/Nikkei 50 index put on 0.88 at 1,470.51.

Speculative trading led activity. Janome Sewing Machine, the most active issue of the day, rose Y27 to Y443, NHK Spring, a leading suspension spring maker, gained Y13 to Y646 and Koito Mig, a car parts maker, advanced Y31 to Y1,000. Uncertainty over currency

fluctuations depressed hightechnology stocks. Toshiba dropped Y11 to Y803 and NEC lost Y20 to Y1.310. Car makers also turned down, with Toyota

nese interests cents to HK\$29.95 following

Motor slipping Y10 to Y2,380 and Nissan Motor declining

Hopes of a recovery in per sonal consumption lifted department stores. Mitsukoshi, the high street retailer, rose Y30 to Y1,190 and Sogo gained Y9 to Y570.

in Osaka, the OSE average fell 152.37 to 23.592.40. Nintendo bucked the trend with a rise of Y100 to Y8,180, helped by a positive outlook for the company's 64-bit video games which are due to be launched

Roundup

HONG KONG was moderately lower as investors took profits following the market's gain of more than 200 points earlier in the week. The rate cuts in

China were largely ignored. The Chinese central bank said late on Tuesday that it would trim its base lending rates to domestic banks by an average of 0.75 basis points and deposit rates by an averge of 0.98 basis points from

The Hang Seng index fell 57.52 to 10,907.01 as turnover remained low at HK\$3.3bn. against Tuesday's HK\$3.6hn.

Brokers noted that although China-related stocks made gains, most dealers were waiting for confirmation that the rate cut signalled the end of Beijing's austerity pro-

The H share index of 18 mainland China companies surged 48.65 or 5.6 per cent

H shares dominated the gain ers: Tsingtao made 27.5 cents or 13 per cent to HK\$2.40, Shanghai Haixing surged 10.5 per cent to HK\$0.63 and Kunming Machine jumped 13 cents or 14 per cent to HK\$1.05. Among the major blue chips,

Swire A shed HK\$1.25 to HK\$64.76 after its covered war rant issue and the sale of its local airline holdings to Chi-Citic Pacific retreated 45

news that it had agreed to spend more than HK\$6bn to raise its stake in Swire's Cathay Pacific Airways division, up 40 cents to HK\$13.90. TAIPRI reversed an early rise as financials failed to sup-

port the overall market. The weighted index lost 20.14 or 0.8 per cent to 6,114.14, off a session's high of 6,184.79. Turnover was T\$61.5bn, down from

Monday's T\$87bn. Paper and construction shares were hit hard: Fortune Construction slid T\$1.50 to T\$38.50. But transportation stocks rose on persistent hopes of direct links with China, with China Airlines up by the daily permitted 7 per cent limit to T\$38.50. in electronics, Acer

climbed T\$2 to T\$61. JAKARTA ended higher in moderate trading as investors bought selectively following price corrections over the last two sessions. The JSX index rose 5.56 to 629.47. Advancing stocks led declining issues by 62 to 42, with 41 shares unchanged and 93 untraded. Volume was 60.8m shares, in

turnover of Rp167.9bn. ture, rising Rp75 to Rp3,950 on 1m shares dealt.

Pan Brothers, a textiles company, moved ahead Rp50 to Rn800 on 1.6m volume on news that the government would give a tax incentive to the textile industry

Barito Pacific, a timber group, surrendered Rp125 to Rp2,225 on news that the stateowned pension funds were to reduce portfolio holdings in the THE PARTY.

On the foreign board, Astra. International rebounded Rp25 to Rp3,475, Panin Bank slid

Rp75 to Rp2,300 and Semen Cibinong appreciated Rp100 to SYDNEY fell back margin-

ally, having languished in neg-ative territory throughout the session. The All Ordinaries index slipped 3.4 to 2,313.4. Share price falls outpaced rises by 355 to 304. Turnover was 276.9m shares valued at A\$526,4m.

Many brokers were waiting for today's release of current account data.

ICI Australia, a chemical and peint manufacturer, tumbled 55 cents to A\$11.20, reflecting disappointment with its interim profits which were announced on Tuesday.

Azon, a diversified industrial concern, rallied 28 cents to A\$2.20 following an A\$2.10 a share takeover offer from Pacific BBA. Pacific BBA, a maker of

automotive components and construction products, said

alternative, valuing Azon shares at A\$2.21 based on Pacific BBA's closing price

Mining stocks were mixed, with Western Mining climbing 15 cents to A\$9.43, and Plutonic

Resources, a gold miner, falling 32 cents to A\$7.43. BHP, the steel, mining and energy group, gained 12 cents to A\$19.71, while CRA shed 4

cents to A\$20.60. The oil and gas index closed up 0.6 per cent, supported by a 13-cent rise in Woodside Petroleum to A\$7.49. The company outlined expansion plans at its

annual meeting on Tuesday. WELLINGTON lost ground in quiet trading as debt market weakness sidelined most

The yield on short-term 90-day bank bills has soared to around 9.57 per cent from lev els of about 9.15 per cent in mid-April

Brokers said the rise had hurt export and interest ratesensitive stocks, such as Telecom and Fletcher Challengs

Forests Division. The NZSE-40 capital pidez eased 10.05 to 2.143.13. Turnover was 20.4m shares

valued at NZ\$54.2m. Analysts felt that high interest yields had been the main cause behind weakness in Telecom, which lost 2 cents at NZ\$6.16. Fletcher Forests Division finished a cent softer

at NZ\$1.87. DELHI was open for business as Bombay, Calcutta and Madras were closed for May Day. The index moved forward

5.22 to 878.83. Polyester and industrial yarn maker Century Ruka strengthened 15.5 per cent to Rps2,378.15 on good results for the fiscal year 1995/96.

The company said on Tuesday that its net profits have risen to Rps246.9m, from Ros76.6m a year ago, a figure which was depressed by strike action at its factories.

Reliance jumped Rps22.05 or 9 per cant to Rps266.70, with more than 17.6m shares traded as it attracted heavy specula-

 Shenzhen and Shanghai were closed for International Workers' Day. Other markets shut yesterday included Kal-aysia, Pakistan, South Korea, Sri Lanks, Singapore, and

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The Sky algorithm that did not add up

An FT investigation by William Lewis raises questions over tax and management control within News group

For Professor Adi Shamir, one of Israel's foremost mathematicians, it was the breakthrough he had long worked

By 1980 he had, with others, developed a mathematical process, the Fiat-Shamir algorithm, which could be used in encryption systems to protect

The Weizmann Institute of Science, the academic institution in Israel where Prof Shamir worked, was keen to exploit the technology commercially through its

company, Yeda Research and Development.

At first it was thought the encryption technology would be used only for bank transactions, information distribution and other security applications. But it became clear that it had another lucrative application - the restriction of access to stellite television broadcasts and pay

The success of the UE satellite broadcaster Sky TV - now 40 per cent owned by Mr Rupert Murdoch's News Corporation and called BSkyB - is based on Prof Shamir's system, known as VideoCrypt.

Smart cards are a vital part of News group's business. The encryption technology used by Sky is also used by Star, News's Asian digital pay television venture, as well as in several other TV

More than 3m UK homes have satellite dishes and smart cards which enable them to "unlock" channels they have paid for. Periodically a new set of cards is sent

out to subscribers in an attempt to beat off the threat of piracy.

In the UK, most satellite subscription services use the News group-owned VideoCrypt system. Cable companies argue that BSkyB's dominance of the VideoCrypt technology has become a gold

The technology is also said to be vital to Mr Murdoch's plans to expand News group's TV interests worldwide. Analysts have pointed out how smart cards would enable TV programmes to be vetted ahead

Encryption factor:

'Name Group transferred News Publishers' 60% state to NCHL

In 1992, News Corp trought minority shareholders in NDSP. It note them 100% through a LIK subsidiary, News Datacom

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according to News group. News group says he is saing IDG, kit Stinger and others in street for paying and others in the proofessor sain of IDG shares. Leo Kreiger Porner chief manoist officiality.

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October 1995 that "located control NDSP was "marely a partial and the active management of

NDC chief executive sites Mr Price.

Tried to find second supplier for

Michael Chaper Director of NDSP and NDRL 1988-

92. Co-defendant in News group? suit. "Controlled and directed" IDG

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Rupert Murdoch's main quoted

(UIQ. Parent company is News ...

Part of the News Corp group, Held

of broadcast in countries such as China, where News group hopes to expand.

Alongside its evident success, however, the exploitation by others of Prof Shamir's algorithm has led to allegations by the News Corp group of fraud and a long-running conspiracy. The News group of companies is involved in several legal disputes, including one in the High Court in London.

Documents relating to the disputes, together with numerous interviews, have

IDQ

NDC took it over in 1992, moved

Editionary with Catalysis in Visit resulting to selecting granutecture of smart cards in the US Appende and Indian sub-continent, New Moory

righen sub-continent, NGMARCOTI Makins Michael Clinger behald owns 60% through Film Insectments and Mr Marys, 40%. Co-defendant to News group

enabled the Financial Times to piece together the short but turbulent life of News Datacom, the conduit for smart cards from News group to BSkyB and

News Datacom's history has involved offshore companies, disguised payments to executives, private investigators and secret telephone recordings.

The findings raise serious tax questions as well as questions about internal management control within News group over several years.

Jersey company through which Bruce Hundertmark was paid for his services by filese group.

had 20% stake in NOSP :

News group says card sharps cost it £19m

ews International, the main UK subsidiary of the News Corp group, claims that it has lost more than £19m as the result of a long-running "conspiracy" involving suppli-ers of BSkyB's satellite television smart cards, former employees and one of its own

The allegations

Details of the allegations have emerged in an action started in February in the High Court in London by four News group subsidiaries, including News Datacom, which arranges for the supply of smart cards on behalf of the group.
The losses claimed by News

Datacom as a result of the "conspiracy" amount to £19,122,380, according to Mr Arthur Siskind, News Corp's general counsel. News group companies claim

that "the price paid by News Datacom for smart cards has been artificially inflated" as a result of a long-running conspiracy between Mr Michael Clinger, a former director of a News group subsidiary, Mr Meir Matatyahu, a former employee of News group, Mr Bharat Kumar Marya, a businessman, and several compa-nies associated with him called the Marya companies.

They also allege that Mr Marya and the Marya companies received excessive profits. secret commissions have been received by Mr Clinger and Mr Matatyahu, and NDSP [News Data Security Products which traded as News Datacom] and News Datacom Ltd [the News group company registered in NDSP's business in 19921 have been prevented from putting in place any alternative source of supply of smart cards.

Mr lan Rosenblatt, partner of Rosenblatt solicitors represent-ing most of the so-called Marya companies, said: "There are questionable motives for the litigation. We are defending it vigorously. Obviously any conspiracy is denied".

Management issues

While News group hopes its High Court action will enable it to recoup its alleged losses from overcharging, the claim has led it to disclose embarrassing details of how News Datacom was managed over a number of years. Former directors of News

Datacom who were responsible for the company during different periods in which the alleged fraud took place, include Mr Richard Searby, formerly chairman of News Corp. Mr Peter Stehrenberger, a director of News International, and Mr Gus Fischer, who resigned as a director of News

Between 1988-92 NDSP was 60 per cent owned by News group but is now a wholly owned subsidiary of News

An FT investigation has

management decisions which left it wholly reliant on one group of suppliers for a crucial element of its TV interests. News group claims that its

televictor.

managers' attempts were largely thwarted by the con-spiracy. It admits that attempts to obtain a second source of supply failed and that it was forced to suspend those attempts when its smart cards became hit by pirates' imitations and it needed the Marya companies' help. Issues of internal control are

also raised by News group's allegation that Mr Bruce Hundertmark, the man it entrusted to help form and run NDSP and later appointed a News International director, had a secret deal with IDG, a minority shareholder and a company in which Mr Clinger has a beneficial interest, in relation to its 20 per cent holding in Sky had engaged Mr Bruce

Bundertmark as a consultant in 1967 and he suggested News group should develop its own smart card system to restrict access solely to subscribers. The beginning

Sky Television was Mr Rupert

Murdoch's greet gamble in the late 1980s. To win subscribers, the satellite channel would have to show popular programmes, particularly films. But Hollywood distributors were only prepared to do busi-ness if Sky could control access to its broadcasts. On News group's behalf, Mr

Hundertmark negotiated a joint venture with Prof Adi Shamir, a pioneer of encryption technology, and Yeda the company through which Weizmann Institute of Science, Prof Shamir's employer, commercially exploits new technol-Yeda granted News an exclu-

sive licence to Prof Shamir's algorithm in return for a combined 20 per cent interest in a joint venture, News Data Security Products. IDG took a 20 per cent stake. Just months before the deal, the US Securities and Exchange Commission, the watchdog of the US financial community, had taken action against Mr Clinger relating to his actions while at Endo-Lase, a bankrupt US medical equipment com-

While NDSP could handle the conceptual side of the VideoCrypt encryption system, it had to work with another company, Thomson Consumer Electronics of France, to provide necessary decoder hard-

The first batches of smart cards were bought from Gemplus Card, which was one of only a small number of smart card producers. News group claims that "Mr Hundertmark therefore suggested that NDSP should set up its own factory to manufacture them." In a joint venture between

NDSP and Gemplus in Livingston, Scotland, a factory was established a few hundred

venture was called News Gem, a Hong Kong company registered in Scotland as an overseas company.

From late 1989 until June 1991, News Gem used the plastic cards and module assembly supplied by Gempius, and assembled and tested the smart cards. News group claims that its intention was for News Gem to communication the micromodule and microchip which were inserted in the module assembly, and thus produce complete smart cards.

Hundertmark

In January 1989, with News group apparently unaware of Mr Hundertmark's alleged "secret arrangement" with Mr Clinger, Mr Hundertmark became an employee of News International (NI), and one month later was appointed an executive director. Within a year, however, Mr

Hundertmark began to suffer health problems and spent more time in Australia, according to Mr Peter Stehrenberger, NI's company secretary. It was decided that Mr Hundertmark should be asked to leave, he states, and on May 18 1990, he resigned as a director of NI and

Only after his departure, News group says, did it come to light that between March and April 1990 Mr Hundertmark had entered into five distribution contracts, including one with Catalyst – an alleged member of the conspiracy - on behalf of NDSP, allegedly contrary to what had been agreed by the NDSP board.

News group claims that once tracts to distribute smart cards, steps were taken to renegotiate their terms. Responsibility for renegotiat-

ing with Catalyst was given to Mr Clinger, and a new agreement was entered into in August 1990. News group claims it did not at that stage know that 60 per cent of the shares in Catalyst were beneficially owned by Mr Clinger. The reliance of NDSP on the

Marya companies increased further at about the end of 1990 when News group contracted PMI, connected with Mr Marya, to start supplying smart cards to NDSP. Livingston

Within months, News group claims, the Marya companies had turned this into an exclusive supply arrangement. One of the main reasons was the decision taken by the NDSP board in June 1991 to cease assembly of smart cards at the Livingston factory, which would have enabled the News group to produce complete smart cards. Insteed programming of the cards was to be carried out at the NDSP facility in Maidenhead, Berk-In its legal action News

group blames Mr Clinger. Mr Siskind claims that other NDSP directors were swayed

News group now claims that Mr Clinger's ulterior motive in through a web of offshore comkey source of smart cards sup News group alleges that PMI.

an offshore company incorporated in Liberia operating from Jersey and with bank accounts in Guernsey, has been used as a vehicle for the receipt of payments from News Datacom Money received by PMI has

ellegedly been disbursed to four companies, two controlled by Mr Clinger and two by Mr

Clinger's argument, apparently, that it was accepted by NDSP and the News group. Nevertheless, just months

later – by Autumn 1991 -News group states that it had decided it would have to replace Mr Clinger if the busi ness was to survive. He had become extremely difficult to work with and News group states that it had also decided to buy out the 40 per cent shares in NDSP it did not already hold.

gathering of information was made difficult because there was no central record keeping function. It also states that the responses given by minority Clinger, to requests for information were inadequate and Despite these problems, in

May 1992 the buy-out agreement was signed and in July it was completed. News group paid \$13.2m to buy out by the 40% minority shareholders in NDSP, and News Datacom Ltd (NDC), a UK company and News group subsidiary, then took over the business.

was paid to IDG, the Netherand fair competition agree ment". It was also agreed that further funds would be paid to IDG over a five-year period based on the revenue received by News group. Warranties were obtained from Mr Clinger as part of the deal, News group states. Mr Hundertmark is now claiming that he is entitled to part of IDG's pay out.

The 1992 buy-out and departure of Mr Clinger did nothing to stop the alleged conspiracy and the dependence of NDSP and NDC on the Marya companies for the supply of amart cards, News group claims. NDSP and subsequently NDC were, in effect, locked

making this argument was his alleged beneficial interest. panies, in 60 per cent of PMI, hence his desire to put PMI, a Marya company, in place as a

Such was the force of Mr

News group's 60% state in NESP. 1988-91. (Bermude) Name Cayment Holdings (NCHL)
"Bought" NP L's 60% state in
NOSP sheet of the \$13.2m bagout by News group of other 40%
minority shareholders in July 1962.
Part of the News Corp group

News Sate Socurity Products (NDSP): Held 100% of NDRL, 1958-82 (Hong Kong). At center of suits in a Corp against former Incorporated as Bungo Ltd in Heigh Kong in 1987 to act as the joint venture to mount to develop and second to the company to develop and explain explain explain explain explain to the wild will we company to the wild will we company to the well and the well well and the well and the well well and the well The buy-out

Due diligence was undertaken.

News group says, but it failed to uncover the alleged conspir-News group admits that the

News group states that \$5m

lands Antilles company, for its shares in NDSP, plus a further "Conspiracy"

into a relationship with the

practice they had very little control over the terms on which the cards were supplied and the price they were paying, News group claims.

The production process volved microchips bought by NDSP and NDC direct from Motorola of the US, and subsequently from Sigmens, being provided to the Marya companies. Once the cards had been assembled by the Marya companies, they were shipped to PMI in Jersey and from there they were sent on to NDSP and NDC in Maidenhead, and later to premises near Heathrow, for programming.
News group believes Mr Chin-

ser continued to play a part in

1992 buy out. Mr Matatyahu, appointed head of operations and logistics manager in February 1992 with primary responsibility for the purchase of smart cards, also became involved. News group claim, trustrating NDC's efforts to find a second source of

it has failed to identify with certainty how Mr Matatyahu has been receiving his alleged commission. Its belief that Mr Clinger has been involved in a conspiracy against it has been followed by the group's not completing payments to IDG under the 1992 buy-out agreerow in London has been Parts of the conspiracy alle-

somet of Alexan Corporation

Elexon Hursdertreack's cleperture

gations are said to be corroborated by transcripts of tape recordings provided to News group by Mr Leo Krelger, NDSP's former chief financial

In its High Court action, News group details how attempts it made to locate an alternative source of supply were hampered by its managers' lack of relevant expertise. Mr Arthur Siskind, News Corp's general counsel, states that the management of News Datacom in Maidenhead to whom Mr Matatyahu reported

the conspiracy even after the ment. Arbitration on the did not have the technical expertise to challenge Mr

of the News Datacom smart card

its tax planning. According to NDRL's israeli lawyers, his job win-to "rebreatively determine now

of betudities and or saw extent throng

each project done during the dask

is cross as possible to the objectives of almost no profits for NDRL*

Anyway, efforts to find & alternative source of smart card suppliers were put on hold when a more immediate threat to its business emerged pirates gaining access to Sky's transmissions illegally. To beat this threat, the group needed co-operation from the Marya companies, which it got. Later in 1994 efforts made by

News group "to find a second source met with great hostility from Mr Marya who threatened to withhold supplies of cards" Mr Siskind says. News group

Dark tax affairs in a corner of Rupert Murdoch's empire

Data Security Products, a Hong Kong-registered company which oversaw the development and production of the smart card used to prevent the piracy of satellite broadcasts, give a rare elimpse into the tax affairs of an important corner of Mr Rupert Murdoch's corporate empire. The level of tax paid by News

Corporation, the group's parent company, and its subsidiaries, has long been a controversial issue. The NDSP documents seen by the FT throw some light on this.

Documents show how the company's operations and accounts were structured to minimise the revenues reported to tax authorities in Israel, where its wholly-owned subsidiary News Datacom Research (NDRL), was based and carried out its business, and also in the UK where the company has also carried

nternal documents from News out activities.

The structure led to NDSP, in which News group held a 60 per cent stake, being liable for tax in Hong Kong, where it was registered. NDSP traded as News Datacom and that became its official name after News group took 100 per cent ownership in 1992 through a UK registered company called News Datacom Ltd. The documents also show how

remuneration to NDSP executives was paid, out of Hong Kong, to a variety of foreign bank accounts. Executives had some of their remuneration paid as consultancy fees, but booked as directors fees in the

NDSP bought R&D services from NDRL on a so-called "cost-plus" basis, but in a letter written in July 1991, Mr Leo Kreiger, the then chief financial officer of NDSP, says: providing information" in relation "When NDSP and NDRL were to its High Court action.

established, it was recognised that certain steps were required in order to distance NDC (NDSP) revenue from Israell income tar." Mr Kreiger said the method used

for recording "projects" and "cost-ings" did not have any significance other than for Israeli income tax purposes. "They are primarily developed to allow for appropriate timing of reporting revenue to the Israeli income tax authorities to result in negligible profit."

Mr Kreiger says "these are tax avoiding (as opposed to tax evading) devices" and that "Arthur Andersea [auditor of News Corp] does not even review these documents". News group has agreed to pay Mr Kreiger, who last year was queetioned by the Israeli Revenue about his personal tax affaire, in return for his "assistance in analysing and

In another memo dated February then a director of News Interna-1993, Mr Kreiger is said to have warned Herzog, Fox and Neeman, News Datacom's lawyers in Tel Aviv, that a former company employee who knew of the "company's tax planning" could "approach the tax authorities in largel with this information". Herzog's note of the meeting

states that at the financial year end the employee, known as Yagel, "had to retroactively determine how much value was to be attributed to each project done during the past year to achieve economic results as close as possible to the objectives of altetost no profits for NDRL". Other internal NDSP documents

raise questions about the tax jurisdiction in which management and control of the company took place, crucial in determining where it should be liable for tax.

Mr Kreiger told Mr Gus Fischer,

tional, whose parent company is News Corp, that "management and control was not exercised from the UK" in discussions about the tax status of Mr Bruce Hundertmark, the former director of News International facing action in the High Mr Kreiger, in the memo dated

supply.

June 1990, discussed how the location of senior executives of News Datacom residing in the UK "and being responsible for company sale activities", could mean that "NDC [NDSP] would be exposed to inland Revenue claims of NDC [NDSP] trading from and in the UK".

Mr Avi Alter, a leading tax expert in Israel, concluded in a report dated October 1995 that the "foreign control" of NDSP was "merely a façade, and the actual management and control of NDSP were based in

management and control was not in the UK, Arthur Andersen stating, in another document, that management was not in Hong Kong, Mr Alter says: "Since management must be centred somewhere...the 'nerve centre' of NDSP must be deemed to be in Israel." Mr Alter, who as News group points out does not state who com-

missioned his report, concludes that NDSP is liable for Israeli tax on its income from all of its activities during the period in question. News group, through Herzog, strongly denies Mr Alter's conclu-

sion and says management and con-trol was outside of Israel and it was not liable for tax there. Herzog says "the description of

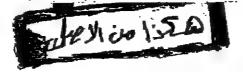
the facts is clearly slanted against NDSP" and "it is highly prejudicial to NDSP's interests". The response also says that NDSP was estab-

With Mr Kreiger stating that lished in Hong Kong for "valid business considerations". Throughout the relevant period NDSP had "accumulated losses and the whole question of its Israeli tax liability is therefore academic". Serious questions also arise over

the recording of payments to directors of NDSP. A letter written by Mr Bruce Hun-

dertmark, then a director of NDSP

and also of News International, to Mr Daniel Doo, NDSP's secretary in Hong Kong, dated August 16 1988, states: "As you are aware from the last NDSP board meeting in Hong Kong, there was unanimous agreement to pay certain individuals consultancy fees as part of their remu-neration." He told Mr Doo NDSP directors had agreed to "book these payments as directors' fees and not as consultancy fees, therefore there should be no additional record of

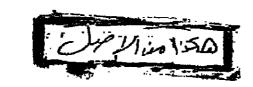


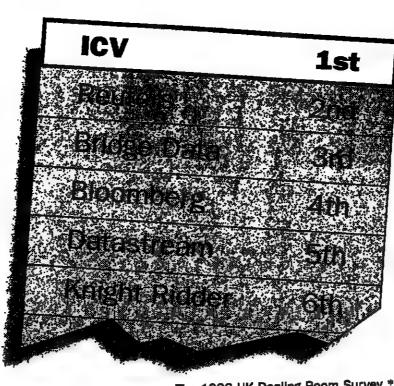
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Getting a good hearing

ake the kind of sound mixer found in recording studios, digitalise the operation, put it on a chip measuring less than half a centimetre square and you will have the making of a good hearing

This, roughly speaking, is what two rival Danish hearing aid manufacturers, Oticon and Widex, have done. A third Danish company, Danavox, is expec-ted to follow in their footsteps

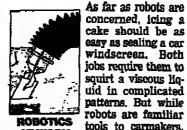
Oticon announced last autumn that it would be launching a 4.5g behind-the-ear digitalised hearing aid in the spring of 1996. Then last week Widex presented an in-the-ear device weighing just 1.5g, including a battery with a working life of 165 hours. Jan Topholm, Widex chairman, says the company expects to produce between 50,000 and 100,000 of the new aids within the first year. Whichever device is chosen by users, the Danish companies have stolen a march on their

international competitors. The Widex aid, called Senso, is based on a proprietary chip developed by the company in co-operation with an undisclosed international chip manufacturer. The chip samples sound received at the rate of 1m samples per second. It processes and redistributes the sound to the wearer of the aid at a rate of 32,000 20-bit "words" a second.

Digitalisation means that the device can be programmed rather like the recording studio sound-mixer, to suppress background noise and to recognise and enhance the speech of the person the wearer is talking

Widex claims that it has been able to eliminate whistling, which is caused by an acoustic feedback loop (the microphone picks up the sound being broadcast by the hearing aid and deasts it). The aid itself measures hearing loss and programs automatically for optimal compensation, so the wearer does not have to adjust the

Hilary Barnes



concerned, icing a cake should be as easy as sealing a car windscreen. Both jobs require them to squirt a viscous liquid in complicated patterns. But while robots are familiar tools to carmakers,

AT WORK they are nearstrangers to food processors. There may be fewer than 20 sophisticated examples in the UK and most are used in packaging and warehousing rather than food preparation, according to the British Robot Association. Use on the Continent is wider but still limited.

Two crucial factors have inhibited robot penetration of food preparation, says Peter Wallin, head of food engineering and manufacture at Leatherhead Food Research Association near London. First, people are reluctant to invest, he says. Food manufacturers survive on notoriously thin margins and have little difficulty hiring unskilled staff at pay rates as low as £100 a week.

Second, many food manufacturers "lack a vision for manufacture and how it relates to profitability", says Wallin. They are focused instead on developing their rapidly changing products and markets. They also tend to be weak on technology because they have cut their staffs or had their fingers burnt on high-tech projects in the past.

To explore these issues, Leather-

head and the Ministry of Agriculture, Fisheries and Food hope to attract 100 delegates to a one-day seminar on food robotics at Leatherhead on June 7.

"It is difficult to find food people who openly admit they have got a robot and that it works. They want to keep it a secret," says Bob Lloyd, chairman of the BRA and project manager of the food division of Intelligent Systems, a robot and systems integrator.

Those who have made them work keep very quiet because of the potentially huge productivity gains. In the food industry a small manufacturer can rapidly gear up to be a big one if it can devise an innovative or cost-effective product. Among big processors, Unilever, Nestlé and Mars are widely rumoured to be keen developers of robots but so competitive an issue is it that they barely acknowledge their interest in the machines.

Big breakthroughs have tended to come in highly concentrated, big and competitive sectors, typically where they dominate a nation's agribusiness. Thus robots butcher sheep in New Zealand, slice pork in Denmark, fillet fish in Iceland, pack chocolates in Switzerland and make schnitzels in Germany.

The British must be a nation of cake and biscuit eaters because that



Food processors are cov about automation, says Roderick Oram

Secret ingredient

is one area where the cost-benefit equation of robots is beginning to show enticing results as equipment improves and experienced is gained.

"We are probably about a year away from finding the right cost solution," says Paul Kitchener, operations director of McVitie's, the United Biscuits subsidiary. His goal is to develop a robotic head with visual recognition powers that could be used widely across the group. McVitie's already has one packaging cheese biscuits and is about to install a second to delicately pack custard products.

Similarly, Fox's, Northern Foods' biscuit subsidiary, is using simple robots without image definition to help pack assortments of biscuits. But it is still people that insert the trickler items into the tins and do the final inspection. Gary Glover, general manager of Fox's Kirkham factory, readily acknowledges this use is closer to mechanical handling than true robotics but he is seeking more sophisticated applications. "We are all keen but

with an eye on the commercial

Robots are making inroads in more technical areas of food preparation. Affordable Automation of Manchester used CRS robots from Canada, for example, to automate nuclear magnetic resonance spectroscopy testing of food samples for a leading processor. It also offers a CRS robot skilled in icing but so far has no UK takers, says Tony Evans, managing director.

"The payback is coming down to two or three years," says David Bennett, manager of the food sector for ABB Flexible Automation, a subsidiary of the Swedish-Swiss group which began its food thrust less than three years ago. Prices can start at about £100,000 for a single robot on a single packaging line. ABB stresses that robots have a high residual value. They come with three years' free maintenance, have a long life and users can easily move them to other tasks if their needs change.

ABB and other robot makers also stress operational benefits such as the control and information that robots bring to the use of ingredients, particularly seasonal ones, in food processing.

The tough technological challenges lie ahead, however. The food industry should be ideal for robots. Many tasks in food preparation and packaging are repetitive but the orders can be small and intricate. One supermarket might specify, for example, that six slices of pepperoni are arranged in a circle on its own-label chilled pizzas while another calls for eight slices in

A chilled pizza line today might have highly automated dough making and baking and dispensing of cheese and tomato pastes, but downstream scores of people place the toppings. Similarly, hundreds of thousands of fresh sandwiches are made in factories each day but by

Fresh foods present particular challenges with health and safety regulations working largely in robots' favour. Pizzas and sandwiches, for example, would have a longer shelf life if they were made in a near freezing, deoxygenated atmosphere. But they can also replace humans in less hostils but still unpleasant environments such as a cold abattolr. An occupational hazard for butchers is repetitive stress injury caused by wielding knives in low

But these are the very applications where robots still need a lot of adaptation from their car industry forebears. Some already ice a cake in 15 seconds or slice chicken breasts in moments but more speed and dexterity is needed. Moreover, strict hygiene standards require easy cleaning of, say, stainless steel robots in a pristine environment far removed from a

Until robot makers and systems integrators find cost-effective solutions to these difficult tasks, food processors are likely to remain heavily dependent on chesp labour.

Worth Watching · Vanessa Houlder



Robots lend a hand in prostate surgery

A robotic device designed to help surgeons carry out prostate operations is likely to begin clinical trials in the coming

Prostate operations involve the painstaking paring down of tissue over a period of up to 90 minutes. By making the task less taxing, it is possible that surgeons could perform more operations during the day.

The robotic device could make the operation less tiring because the surgical instrument would be manipulated using a hand-held joystick. Future developments could include an ultrasound imaging system to guide the surgeon on how deeply to

The system was developed by Dryburn Hospital in Durham and Labman Automation in Stokesley and demonstrated at last week's Institute of Physics conference. Institute of Physics: UK, tel (0)171 470 4800; fax (0)171 470 4848.

Dalmier's stripey defect detector

Daimier-Benz, the German carmaker, has improved its ability to detect defects in car parts, by using an optical technique that involves shining a pattern of stripes on to the metal.

The pattern, which is monitored with a video camera, will appear distorted even if the surface is only a few hundredths of a millimetre out of line. Even smaller rough spots can be discovered by using a compo

Daimler-Benz: Germany, tel 7111793039; fax 7111794365

Copyright on electronic pictures

As electronic distribution becomes more common, picture libraries and news agencies have a growing need to pretect their

copyright on still and moving pictures. CRL, Thorn EMI's former central research laboratories, has found a method of introducing a "watermark" into the image. Its technique of "visual masking" involves introducing a unione code, known as a Visually

Rmhedded Code, into the image is such a way that it cannot be removed from even the smallest sample of the image. CRL: UK, tel (0)181 848 6661; fax (0)181 848 6683

PCs built with recyclable casing

The difficulty and cost of disposing of obsolete computer. equipment is rising as the normal life cycles of business personal computers gets shorter, writes Louise Kenoe

To cut disposal costs and bely safeguard the environment, Dell Computer has introduced a PC chassis made entirely of recyclable materials. It is made of a durable plastic that is free of coatings or fillers that normally prevent recycling. The structure is supported with preplated cold rolled steel, which can be separated quickly with the twist of a screwdriver. The plastic is identified and marked in accordance with international ISO standards.

Information on Dell's World Wide Web site, http://www.dell.com

Satellites at risk from the sun

The UK's Defence Evaluation and Research Agency has found "conclusive evidence" that many satellites are at risk from electrostatic discharges while in orbit. The researchers' aim is to find a way to protect future missions against these internal charging effects which can result in hugely expensive satellite

Satellites could be particularly susceptible early next year when the 11-year solar cycle of activity on the sun's surface reaches a minimum. At this time, electrons penetrate thin coverings of the satellites and produce a ... dangerous build-up of charge. The microelectronics circuit that was especially susceptible to charge build up.

Dera: UK, tel (0)1252 394627; fax (0)1252 394B7I.



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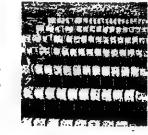


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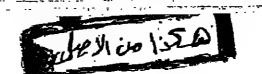


Thermal and Energy Technology









Broadway

comes to

the

Proms

Haydu's The Creation, have a

Kenyon, the controller of Radio 3. But the formula of

the most successful music

festival in the world stavs

words, "a combination of

quality and popularity".

much the same: in Kenyon's

There are no great themes

but one of the under-currents

running through the record

number of 72 proms, all to be held this year at the Albert

looking back to their mentors

re-interpreting Tchalkovsky; and Elgar, Bach. There is also

a spread of "Te Deums", from

featured this year), Dvořák

Kenyon is taking a more liberal view of the Last Night

Hall, is creation and

re-creation - composers

So there is Stravinsky

Havdn. Bruckner (well

junketings than his

who wanted a subdued.

in favour of a spirit of

genuine celebration",

respectful audience. "I'm

although in the first half there

will be a London première for

In all there will be 25 new

works performed at the Proms including five BBC commissions. Kenyon is keen

to present music that for some

reason has been overlooked by

the Proms, ranging from a

Bach Mass to Stravinsky's

a linked series of chambe

music concerts. Another

novelty is a Schools Prom

There are some

opera, including the five act

Italian version of Verdi's *Don* Carlos performed by the

in the concert

performances of

interesting curiosities

"The Flood". Among other

innovations will be the music

of Duke Ellington; a late-night

Prom of Broadway songs; and

Poul Ruders' "Concerto in

and others.

Pieces"

new director to Nicholas

he 1996 Proms, which

open at the Royal Albert Hall on July 19

with a performance of

ENS D.G.

t in India

arma: Tirana (C)

Cinema/Nigel Andrews

Dirty Dozen in Tarantino-land

title" Oscar, Things To Do In Denver When You're Dead would vanquish all opposition. Ascending the stage in spotless tuxedos, the makers would clasp the gold statue and thank the following. The city named Denver for conjuring by its very sound a pluperfect provin-cialism; the alliterative rhythm of "dead" and "Denver", sug-gesting interchangeable concepts; and the iambic brio of the whole phrase, which could come from Shakespeare via

Chandler and Tarantino.

The film is as good as its name. First-time feature director Gary Fleder steers a dream cast through dream dialogue, written by fellow debutant Scott Rosenberg, while a crazed visual elegance transforms the plot about five semiretired hoodlums bungling -fatally - a last simple assign-

Car hero is gangster turned "afterlife advice" manager Andy Garcia, who video-records dying people's counsel to their surviving loved ones. When he takes a day off work to help crippled crime boss Christopher Walken, it proves to be less a day, more a lifetime. Walken's retarded childmolesting brother was about to be saved by the love of a good woman when the girl fell for a passing playboy. Frighten the playboy off!, hisses Walken. And he glowers through corpse-like cheeks with the little energy left from mouthsteering his wheelchair.

You may guess what happens. Rainy night road; blinding lights; boy pulled up by Garcia's cronies dressed as fake patrolmen. Then the unexpected flash of knife, the unplanned gunshot. Exit in all directions the cronies. Since these include a nervous porn film projector (Christopher Lloyd), an overweight black film as a mangy chorus figure,

(William Forsyth) and a morgue-working ex-boxer (Treat Williams) who uses dead bodies as punchbags, you understand that they will follow any signpost that says "Trouble and disaster".

Disbellef is suspended early

on. We spend a mere pedantic minute or so wondering why a well-oiled smoothie like Garcia, who has applied to his hair all the unguent he does not use in his speeches, would even think of employing these brain-deficient henchpersons. Or why he goes back to Walken after the botched job, as if to tickle the

> THINGS TO DO IN DENVER WHEN YOU'RE DEAD Gary Fleder

MARY REILLY Stephen Frears

HACKERS **Iain Softley**

BARB WIRE David Hogan

tummy of his own nemesis. No: having decided on a plot reminiscent of a discount Dirty Dozen, Fleder and Rosenberg run with its vast surreal potential. This is clearly Tarantinoland, where style knows no morality, apocalypse needs no logic (or not much) and the vernacular is as rich as the reek of crime.

Gormless hit men use words like "specious" and "anon". ("Gus has been reading the dictionary" explains his partner). Choice terms include "faecofreak", "mammy rammer" and "buckwheat": the last meaning that you have disappointed the boss and are about to be threshed by a alow death. And Jack Warden almost steals the pest controller (Bill Nunn), a explaining the story's jargon trailer-dwelling down-and-out from his diner-table. This glori-

ous actor, with his echo cham-ber voice and raddled lion face, might have wandered in suns costume change from playing Tiresias in Woody Allen's Mighty Aphrodite.
The film finds time, but

shouldn't have, for two love subplots. Garcia vacillates between high-class beauty Gabrielle Anwar and hooker Fairuza Balk. Both women come wearing signs, the "chance of a better life" and the "tart with a heart"; which is a shame in a film that everywhere else resembles a maze you never want to find your way out of, even if you should accidentally stumble on its notional centre.

One of the things not to do in Denver, even if dead, is see Mary Reilly. Director Stephen Frears and screenwriter Christopher Hampton may have viewed this project as "Danger-ous Liaisons Two": another study in outré eroticism from the team that brought us Glenn Close and John Malkovich as the Laclos-based fancy dress sex-adventurers.

Both actors are back, she in a bosomy vignette as a Victorian brothel keeper, he as Dr Jekyll and Mr Hyde. The source novel is Valerie Martin's re-telling of Stevenson's horror yarn from the viewpoint of Jekyll's servant maid, played by Julia Roberts. Ergo, it is Wide Sargasso Sea or Rosencrantz And Guildenstern Are Dead by another session of Virtual Plagiarism.

The through-the-keyhole approach results in a visual perspective almost as cramped and frustrating. Cinematogra-pher Philippe Rousselot's low lighting and designer Stuart Craig's doom-grey interiors stifle what small life there in the two main performances. We hesitate to say "three" since Malkovich's monster is distinguished from his medico by little save long hair and a whi-



As good as its name: Andy Garcia and Treat Williams in "Things To Do In Denver When You're Dead'

Roberts, meanwhile, seems like a girl lost without her hoop in an Edward Gorey horror strip. The fey, etiolated per-formance is unhelped by an accent that moves around the British Isles like a backpacker searching for a vacant B-and-B.

The film's crypto-sexual psychopathology is just as vagrant. We begin with Freud: a thrashing eel brought to the kitchen and skinned before our eyes. We pass through R.D. Laing: "I am the bandit, he is merely the cave in which I shelter" says Jekyll of Hyde. And we end with Alien as but no, if you sit through this movie you might as well have the slim reward of its shockhorror climax.

time you can have if you are young and insomniac and own a computer. Every time you draw back your bedroom curtains after a hard night's surfing you will be set upon by the Internet's answer to Interpol: at least according to this rockscored, lollipop-coloured thriller directed by lain Backbeat Softley. The said cops will rush out with guns and gats and haul you off for a hard day's

Why? Because you have just tapped into a millionaire's Swiss bank account and/or the secrets of the universe and/or the minutes of the story conference that produced this insanely brainstorming film. You have to warm to a

Hackers is about the exciting movie that has 11-year-olds committing major industrial sabotage and that never walks when it can run, leap, dance or rollerskate. You have to warm to it, although I am not sure you have actually to see it: at least until it becomes a CD-Rom and you can watch in the comfort of your own snug. police-surveyed bedroom.

Pamela Anderson Lee - the last name has been pinned on her for services to Baywaich and in recognition of her desire to change identity for a feature career - is an extraordinary presence in the sci-fi thriller Barb Wire. The eyes try to find a personality, but are hopelessly detained by the accoutre-

As with Dr Jekyll there are her back for us.

in tight dresses, with the sec-

two of everything, though here they are more viewer-friendly. The leather blouse struggling to stay buttoned I willingly understand. Obviously in the year 2017, in a post-nuclear society, you cannot find a reliable dress shop. But the enor-mous pouting lips and the ditto derriere are beautiful mysteries. How does she speak lucidly through the first or sit down,

That there is a film, and a fairly appalling one, attached to this phenomenon seems academic. Barb Wire is for all those who thought that Jayne Mansfield was dead and that silicon and collagen, those miracle twins, could never bring

> chorus and orchestra of Covent Garden under Bernard Haitink; a rare performance of Beethoven's Leonora, his precursor of Pidelio; and an even rarer revival of Kurt

Mules offers a central strand hard to believe, despite the Among the orchestras visiting the Proms this year are the Berlin Philharmonic under Claudio Abbado; the Chicago Symphony with both Solti and Barenboim and the New York Philharmonic with Kurt Masur

Weill's *The Silver Lake*.

There will be plenty of early music, Indian music, and lots of Spanish music to celebrate Falla, who died 50 years ago, and Gerhard, who was born 100 years ago. Ticket prices are the same, or only marginally higher, than a year ago, and a season ticket for all Proms at £130 (standing in the arena) must remain one of the best bargains in the

Amid all the concern that classical music is in decline audiences for the Proms remain surprisingly healthy: 81 per cent of capacity last year, a year which was dedicated to new music. The Proms remain the pride and joy of Kenyon and the

Antony Thorncroft

Goya shortchanged in Madrid

n a rare one-man performance, it will grandly called the *año de Goya* by the (£8) to see the Prado's Goyas whereas they be death on a Goya afternoon today ministry of culture is an exhibition in the can at normal times be viewed for Pta400, in Madrid's building. José Miguel Arroyo, a serious young man and a ers as the biggest ever Coya show. The gifted matador who fights under the name exhibition would infuriate Goya and it has of Joselito, is scheduled to kill all six bulls already been savaged critics.

Selected for the corrida and he will dress Writing in El Pais, the influential Madup for the occasion not in the tight-fitting suit of lights" worn by modern-day bull fighters but in the loose 18th-century costume that was the norm in Goya's day.

Joselito's macho gesture – in a normal corrida three matadors kill two bulls apiece - and his sartorial choice will probably be one of the few events that Francisco de Goya would approve of amongst those that are being staged to celebrate the 250th anniversary of his birth. Goya tried his hand as a matador and

the builfight continued to excite his artistic imagination throughout his life. Today's corrida commemorates Madrid's abortive uprising on May 2 1808 against Napoleon's invading troops, an event that moved Goya to paint two giant canvases which hang in the city's Prado museum.

But the artist would not be impressed by a string of minor exhibitions and musical evenings that are being organised to cash in on his anniversary year and he would be scornful about tacky merchandising such as tours of his supposed haunts and special Goya restaurant nights modelled, one fears, on "medieval" banquets. The chief platform of what has been

Prado that has been hailed by its organis-

rid newspaper, Francisco Calvo Serraller. a former Prado director, called the exhibition a "nullity" and loftily denounced a

Tom Burns reports on bungled attempts to cash in on the 250th anniversary of the artist's birth

bare-faced commercial attempt to "exploit culture by tricking the public at Goya's

Swindle is alleged because all of 130 of the 170 Goyas picture in the exhibition, including all the best pictures, already belong to the Prado where they are permanently hung and, indeed, often better hung than they are in the anniversary show. Arranging the exhibition has meant repositioning some canvases into areas of inferior lighting.

In an obvious sense the exhibition is a rip-off because, assembled as they are in the anniversary show, it now costs Pta1000

which is the museum's entry price. The Prado itself has in the meantime been wholly stripped off its Goya collection while the exhibition lasts.

The "nullity" charge is a serious one and critics have raised it on at least three

levels. No attempt has been made to restore less than well preserved Goyas for the exhibition or to re-assert the authenticity of those that could be considered dubious; the exhibition includes only a handful of works from other museums and from private collections and none of them are judged to be "show stoppers"; and no attempt has been made to place Goya in any kind of context either by exhibiting his work with those of his contemporaries or by exploring his debts to earlier painters and his legacy to those that succe

The awful truth is that the año de Goya is the product of last minute rush and improvisation. The decision to hold an exhibition at all in the Prado was taken a scarce six months before it was due to open. Given the extraordinarily tight time frame it is remarkable that the Prado managed to obtain any extra Goya paintings at all for the anniversary show.

Goya: the Prado Museum, Madrid, until June 2. International reservations may be made on 34-1-537 6200.

Theatre

'Mules' under threat

he "mules" who crop up in the news now agree to fly from some thirdworld country to a western capital with a load of cocains or heroin.

The pay is derisory, compared with the profits that a successful trip will make for the real dealer; the risks are great, for the couriers usually carry the drugs not about their persons but in them (you cannot plead that you never knew they were there), and the penal sanctions are severe. Winsome Pinnock's new-ish

play, Mules, at the Royal Court's studio theatre is about three such people, young Jamaican women. She "researched" it while resident in Holloway women's prison for the Clean Break Theatre Company (who put it on first), and elsewhere in the UK and in Jamaica. The result is interesting to watch, and disarmingly performed; but not, I think, a very good

drug-couriers, town ghetto are hired by a needy people who sophisticated ex-Jamaican lady to do "mule" duty, but things go badly in an exemplary way - and a surrounding collage of sub-plot with floating vignettes. In all this, the three black actresses play 12 roles of varying sizes. It is fun to hear their artful mimicking of different black accents (London posh, London East End, Jamaican, Nigerian).

> ut the central strand, being exemplary, is as predictable as any TV docu-drama; and Miss Pinnock has sought to leaven it by foisting self-conscious, hyper-articulate dialogues and monologues upon her characters, along with some very woozy "feminist" morals.

> In a novel, they might read well in third-person form (the novelist tells us what she thinks her characters must be thinking); as uttered on stage in propria persona they are

- two sisters from the Trench- players' valiant, inexpert efforts to give them live conviction.

By the end, one feels slightly better informed about the sad. continuing situation that unreasoned western legislation has brought about (which a TV documentary could have achieved just as well), and tantalised by poetical flashes into the lives of the female third-world poor. Those distinct things do not coalesce Instead, we seem to have two

sub-plays of different kinds running in awkward alternation, to the theatrical detriment of both. All the cast -Abi Eniola, Sheila Whitfield and Clare Perkins - have strong, communicative virtues; I think their director Roxana Silbert might have done much more to lubricate their stiff interplay.

David Murray At the Royal Court Theatre

INTERNATIONAL ARTS GUIDE

ANTWERP

CONCERT De Singel Tel: 32-3-2483800

La Petite Bande: with conductor/ violinist Sigiswald Kuljken and violinist Ryo Terakado perform works by Haydn and Mozart; 8pm; May 6

ATHENS

CONCERT **Athens Concert Hall** Tet: 30-1-7282333 Athens State Orchestra: with conductor Dimitris Chorafas and planist Aris Garoufalls perform works by Ravel, Rachmaninov and Mahler, 6.30pm; May 3

■ BARCELONA

EXHIBITION Museu Picasso Tel: 34-3-3196310 Futurism: exhibition featuring works by the leaders of this movement. These were the artists who signed the first Manifestos: Marinetti (Futurist Manifesto, 1909) and Boccioni, Carra, Russolo, Balla and Severini (Manifesto of Futurist Painters, 1910). The exhibition is supplemented with works by Depero, Sironi and Soffici. The display includes some 60 paintings and 30 drawings, as well as letters, photographs and books; from May 8 to Jul 31

BERLIN

CONCERT Konzerthaus Tel: 49-30-203090 Vogler Quartet: perform works by Haydn, Ligeti and Smetana; 7.30pm; May 5 OPERA

Deutsche Oper Berlin Tel: 49-30-3438401 Lucia di Lammermoor, by Donizetti. Conducted by Marcello Viotti and performed by the Deutsche Oper Berlin. Soloists include Manuel Lanza, Lucia Aliberti, Alfredo Kraus and Volker Hom;

7.30pm; May 6
Komische Oper Tel: 49-30-202600
La Traviata: by Verdi. Conducted by Shao-Chia Lii and performed by the Komische Oper. Soloists include Nadelmann, Fedin and Dobber: 6pm; May 5

Staatsoper unter den Linden Tel: 49-30-2082861 Der Rosenkavalier: by R. Strauss. Conducted by Donald Runnicles and performed by the Staatsoper unter den Linden. Soloists include Tina Kiberg, Günter von Kannen and Iris Vermillion; 6pm; May 4, 7 (6.30pm)

BRUSSELS

THEATRE Rideau de Bruxelles Tel; 32-2-507 83 60 Molty Sweeney: by Brian Friel (in French). Directed by Adrian Brine. The cast includes Cristian Crahay, Danièle Denie and Luc van Grunderbeeck; 8.15pm, Mon 6.30pm; from May 6 to May 11

■ CHICAGO **EXHIBITION**

Art Institute of Chicago Tel: 1-312-4433600

Contemporary British Architects:

Recent Projects from the Architecture Section of the Academy Summer Exhibition: this exhibition features 80 architectural drawings, models and photographs from leading British architects as well as up-and-coming practitioners; to May

■ COLOGNE

OPERA Opernhaus Tel: 49-221-2218240 Die Zauberflöte: bv Mozart. Conducted by Georg Fischer and performed by the Oper Köln. Soloists include Dieter Schweikart, Rainer Trost, Martina Rüping and Iride Martinez; 7.30pm; May 4

LONDON

Royal Opera House - Covent Garden Tel: 44-171-2129234 Anastasia: a choreography by Kenneth MacMillan to music by Tchaikovsky and Martinu, performed by The Royal Ballet. Soloists include Leanne Benjamin, Stuart Cassidy and Jonathan Cope; 7.30pm; May 3,

OPERA London Coliseum Tel: 44-171-8360111 Fidelio: by Beethoven.
 Conducted by Richard Hickox and performed by the English National Opera. Soloists include Anthony Rolfe Johnson, Kathryn Harries and Peter Sidhom; 7.30pm; May 3, 8

Lyttelton Theatre Tel: 44-171-9210631 Blue Remembered Hills: by Dennis Potter. Directed by Patrick Maber and performed by The Roya National Theatre. The cast includes Geraldine Sommerville; 8pm; May 3, 4 (also 3pm), 6

■ LOS ANGELES

EXHIBITION Los Angeles County Museum of Art Tel: 1-213-857-6000

 Photography and Beyond in Japan: Space, Time and Memory: this exhibition of some 90 works by 12 artists surveys the diverse uses of photographic media that have evolved in Japan in the last 15 years and the interrelationships between western and Asian influences. The exhibits range from traditional prints to sculptural works, and from conventional formats to computer-synthesized pictures; to

■ NEW YORK

CONCERT Alice Tully Hall Tel: 1-212-875-5050 ● Emerson String Quartet: perform works by Dvorák, Rorem and Avery Fisher Hall Tel: 1-212-875-5030 The National Chorale: with

conductor Martin Josman perform

Brahms' Requiem and Bernstein's Chichester Psalms. Soloists include Rebecca Copely and Julien Robbins; EXHIBITION

MOMA - Museum of Modern Art. New York Tel: 1-212-708-9400 Lilly Reich - Designer and Architect: the first exhibition devoted to this modernist German designer of the 1920s and 1930s; to May 7

OXFORD EXHIBITION

Museum of Modern Art Tel: 44-1865-722733 Carl Andre Sculptor 1996: the

first large retrospective exhibition of Andre's sculpture to be seen in Britain for 20 years. Highlights of the exhibition include the reconstruction of the installation Equivalents I-VIII, created by Andre in 1966, and the 11 metre square piece called 6-Metal Fugue (for Mendeleev); from May 5 to Jun 30

PARIS CONCERT

Salle Pleyel Tel: 33-1 45 61 53 00 Orchestre Philharmonique de Radio France: with conductor Günther Herbig perform Mozart's Symphony No.36 in C, K425 and Mass in C minor, K427. Soloists include R. Fleming, I. Tamar, I. Beuzon and T. Fechner, 8pm; May 3

ROME

CONCERT Accademia Nazionale di Senta Cecilia Tel: 39-6-3611064 Orchestra dell'Accademia di Santa Cecilia: with conductor

Myung-Whun Chung, soprano Nina Rautio, mezzo-soprano Clnzia De Mola, tenor Gary Lakes and bass Marek Gasztecki perform Debussy's La Mer and Janácek's Glagolitic Mass; 5.30pm; May 5, 6 (9pm), 7 (7.30pm)

■ SAN FRANCISCO EXHIBITION

California Plaza of the Legion of Honor Tel: 1-415-863-3330 Pergamon: The Telephos Frieze from the Great Altar: exhibition of rare and renowned works of Hellenistic sculpture from the second century BC. Twelve newly restored relief sculptures from the Telephos frieze that once decorated the interior court of the Great Altar of Pergamon are on display, along with some 30 other works that help explain the original purpose and placement of the Telephos frieze; from May 4 to Sep 8

ZURICH

OPERA Opemhaus Zürich Tel: 41-1-268 6666 Ormindo: by Cavalli. Conducted by Veronica Scully and performed by the Oper Zürich; 8pm; May 3, 5

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Peter Martin

Polishing up Rover's act

Patience will be needed if BMW is to overcome the inherent difficulties of transferring its premium-pricing strategy to its UK subsidiary

It seems so tempting. In industry after industry, troubled companies plan to escape from their problems by following a BMW strategy: premium pricing for a premium product: technical excellence combined with glamour; limited volume but high returns.

Apple is just the latest company to try to adopt this approach. But following in BMW's footsteps isn't easy. In fact - as this week's news suggests - even BMW finds it dif-

BMW is trying to apply the recipe it used to escape from near-bankruptcy in 1959 to Rover Group, its recent British acquisition. On Monday, however, it announced that Mr John Towers, who had transformed Rover's manufacturing processes before the BMW deal, was leaving as Rover's chief executive.

Mr Towers may indeed have had long-laid plans to leave; he may well be in line for one of the slew of top UK engineering jobs now available. But his departure does nothing to dispel the general impression that BMW is unhappy with the short-term performance of its British acquisition.

Of course, ostensibly friendly cross-border take-overs often follow such a trajectory, particularly when the product is enveloped in national sentiment. First, all is sweetness and light: the acquirer goes out of its way to praise the quality of its new workforce, the depth of managerial talent, the strength of the brand. The subsidiary's long-cherished investment plans are given the parent's blessing. Long-term strategic sourcing plans are agreed.

Then things start to go a bit sour. National characteristics grate a little. Differences over accounting standards, transfer prices or engineering philoso-phy leave one side or the other feeling disgruntled. Before long, all the original directors have moved on, leaving the parent to choose more sympathetic managers.

Over time, the characteristics of the parent win out. The

improvement in the subsidiary's performance, but there is usually little sign of the "best of both cultures" promised at the time of the acquisi-

BMW's experience with Rover may be no more than a playing-out of that familiar pattern. But it may also reflect the inherent difficulties of the strategy it is applying. The essential ingredients are demanding ones.

The most expensive of these sustained high levels of investment to achieve the performance edge that the product positioning requires - is also the simplest. This merely requires deep pockets, which BMW certainly possesses: it has already doubled Rover's investment rate.

More complex are the other requirements. Obtaining superb and ever-improving quality requires the collaboration of the entire company, from managers to cleaners. Rover had made great strides in this area before the BMW takeover, and was certainly at the top of mass-market quality standards. But there has been a suggestion that it is making heavier weather of the higher standards and continuous improvement that a BMW strategy requires.

Achieving markedly superior product design and engineering is equally demanding. In Rover's case, this means restoring design and engineering resources squeezed to vanishing point in the crises of the 1970s and 1980s. But in the car industry generally, it means coping with evertougher competition.

Each year, a greater leap in design and engineering is needed if you hope to persuade the public that the difference is great enough to warrant a premium price. And any British-based car manufacturer faces a special task. The car-buying - or, in the

case of company fleets. carchoosing - public has no preference for its own indigenous brands. Indeed, at the upper end of the price range, there is a marked bias in favour of imports. Once such an attitude takes hold, as General Motors is finding in its attempts to resuscitate Cadillac, years of imageenhancement are required to

Time is, indeed, the fourth demanding aspect of the strat-egy. A genuinely innovative product - the first working ball-point pen, the first truly portable computer, a better-tasting artificial sweetener can obtain a price premium



from the outset. Such a premium is essentially temporary, quickly competed away by imitators. Long-term premium pricing, however, requires long-term achievements in design, image and quality.

In mature industries such as cars, where breakthrough innovations are rare, this long-term premium pricing is the Holy Grail. It is exactly what BMW has achieved.

Time and consistency are very powerful weapons. A company can offset any temporary weakness in product range, for example, by allowing an unexciting model to draw on the lineage of past outstanding designs. As long as the next model is a return to form, no lasting damage has been done, and margins have been kept up in the meantime. BMW's strategy, forged in the aftermath of the 1959 crisis, took two decades to come to its full flowering Time is probably the greatest gift that BMW can give to Rover. Patience is a virtue it is easier to exercise close to home, however.

The replacement for Mr Towers, it is said, will be a British executive from outside both Rover and its parent. The news comes in the same week as the departure of career gasman Cedric Brown from British Gas and reports that ICI may replace nearly a quarter of its top managers with outsiders over the next 18

Meanwhile, GEC has just chosen a new boss from Lucas; GKN has filled its top job with an executive from BOC. Several other engineering companies are looking for bosses, and the assumption is that they will come from outside. It sometimes seems that no-one in British industry rises to the top from inside the company any more.

If the habit of recruiting chief executives from outside has become more prevalent, why has it happened? One pos-sible explanation is the shift of power within the boardroom over the past decade. Once. executives dominated the board both numerically and in practical terms. Now, thanks in part to the Cadbury committee on corporate governance, there are more nonexecutives with an increasingly important role.

On routine decisions, of course, they usually end up deferring to operating expertise. But on big. one-off choices, such as a new chief executive, they come into their own. When such issues arise, the grass on the other side of the fence always looks eener; someone else's wellpublicised chief executive seems a bit more glamorous than the inside candidate. A second reason, often cited

by outgoing chief executives with a sigh, is that de-layering has removed the senior coordinating jobs in which putative successors obtained wideranging responsibilities. These demand-side forces

meet a supply side of headhunters aching to deliver the new chief executives their clients want. But is the resulting musical chairs at the top of British industry desirable? Let's end this article where it began, with a lesson drawn from BMW, undoubtedly one of Europe's best-managed companies.

How has it selected its chief executives? The 1959 rescuer, Herbert Quandt, came from outside: but he immediately appointed an insider. Paul Hahnemann, to run the company. It was Hahnemann who devised the successful BMW strategy. Score one for the insiders.

Hahnemann's successor, however, was Eberhard von Kuenheim, who had joined the company only five years before from Robert Bosch. It was under him that BMW pushed into export markets. with great success. One-all.

Since 1993, the management board chairman has been Bernd Pischetsrieder, a career BMW man. Two-one to the insiders. Is there a lesson there for British industry?

BOOK REVIEW · Peter Montagnon

ASIA RISING: By Jim Rohwer Simon and Schuster, \$25, 382pp

A miracle mixture in the growth hot-house

is lucky, he will make enough out of Asia Rising to buy the house he covets in the old French concession of Shanghai. If he is right, that house will be worth a fortune by the time he

It is difficult for anybody with more than fleeting con-tact with Asia not to come under the spell of its phenomenal growth. Rohwer, who spent several years as Asia editor of The Economist before joining CS First Boston, is no

In 1960, he notes, South Sudan: Taiwan was as poor as were only an eighth as high as those of the US. Around that time Gunnar Myrdal, a Nobel Prize-winning economist, wrote a 2,200-page book

export prospects.

Though circumstances differ from country to country . Taiwan's approach was radically different from the industrial championing favoured by Korea - Mr Rohwer finds sev eral common factors behind

Asia may have an authoritarbeen big spenders on welfare. large fiscal deficits.

Korea was no richer than Zaire. Even in Japan incomes bemoaning Asia's lack of

Now the conventional wisdom has changed. Between 1965 and 1990, the leading economies of east and southeast Asia grew three times as fast as those of the industrialised world. Like most Asia hands. Mr Rohwer assumes that growth will continue.

This book is an attempt to explain the Asian miracle. But it also raises some important questions. Is the miracle really sustainable? And what are the implications for the west?

the region's success.

ian tradition but its governments are less interventionist than those of western democracies. "In human life, economics precedes politics and culture," said Mr Park Chung Hee, who seized power in Korea in 1961. Asian governments have not

If Jim Robwer and thus do not generally run

That in turn makes people more self-reliant and adaptable, more inclined to save. and more appreciative of the social cohesion inherent in family life. Since governments distribute less largesse than in the west - even South Korea has been ruthless in cutting off industries that failed to perform - there is less wasteful spending on vested interests.

Another important difference between Asia and other developing regions was its openness to new technology and new ideas. Brazil tried in vain to develop a protected indigenous computer industry in the 1980s with disastrous consequences for other sectors which depend on electronics such as aerospace. Asia by contrast has been willing to import technology and has not imposed on itself the handicap of an inflex-

ible industrial policy. Somewhere in this mix lies the secret of Asia's success. Mr Rohwer attaches great importance to the close-knit networks of the overseas Chinese, but, like the rest of us in the western media, he has difficulty breaking in.

Legend has it that in 1987 Mr Li Ka-shing, the billionaire Hong Kong Chinese businessman, assembled the finance needed for his unsuccessful bid for Hongkong Land in a single all-night session with his mahjong playing chums. That is an awesome sign of financial muscle. It would be intriguing to know more, but the chapter on the overseas Chinese is a mere 14 pages. The Chinese entrepreneurs who play such an mportant role are conspicuous by their silence.

The region has its frailties, too. Rohwer says its institutions may be too weak to regulate the complex economies that are now emerging. Its infrastructure is creaking and its financial system primitive. There is a security risk in

China's growing power and in

North Korea. There is also the

risk that Asian society will

become flabby as its newly affluent middle classes demand

more democracy and welfare. Mr Lee Kuan Yew. Singapore's senior minister, cautions that "we can't have single mothers. It's totally unacceptable, and we keep it unacceptable." But divorce rates have risen, and government spending has grown sharply in the new democracies like Taiwan.

Rohwer's guess is that Asia will steer its way through these minefields. Growth will continue, though it might slow down for a while around the turn of the century as the infrastructure problems are

finally dealt with. The west, he argues, should see in this an opportunity rather than a threat. The new Asian middle class will create a massive consumer market. McKinsey, the consultancy group, reckons that owner in of colour televisions shoots up from under 40 per cent to about 75 per cent when average annual incomes reach \$1,000. China already had 60m consumers in this pool in 1992. The number will be 270m by

the turn of the century. The other side of the coin. which Rohwer downplays, is the impact on commodity prices. Grain prices are creeping up as Asians demand more food. Oil demand will grow as they drive more cars.

Western societies will have to pay higher prices for these commodities too. Asia with its canny ways may learn to compensate with higher productivity. The west, which is less adaptable, may simply grow relatively poorer.

That is a real concern for the rest of the world, particularly now that China with its 1.2bn people has joined the fastgrowth league. Rohwer makes little of it. But with his house in Shanghai, he will at least have hedged his bets.

Asia Rising is available from FT Bookshop by ringing -44 181 964 1251 or fax credit calt and packing £1.50 in Europe)

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·LETTERS TO THE EDITOR·

Number One Southwark Bridge, London SE1 9HL

We are keen to encourage letters from readers around the world. Letters may be faxed to +44 171-873 5938 (please set fax to 'fine'), e,mail: letters,editor@ft.com Translation may be available for letters written in the main international languages.

Cost of ethically unacceptable behaviour

From Prof Michael Singer. Sir, Your leader "Sexual harassment" (April 29) appeared on the same day as detailed press reports here of the allegations against Mitsubishi. The Equal **Employment Opportunities** Commission alleges in its lawsuit that supervisors at Mitsubishi routinely addressed women employees as "slut", "whore" or "bitch" rather than by name, that men grabbed women's breasts, buttocks and

female co-worker's legs and pulled the trigger, that some women had their work sabotaged, resulting in injuries, and more. If these allegations are true, the EEOC is protecting fundamental rights and not, as you put it. trying "to codify such complexities as relationships

between the sexes". Grotesque behaviour of the kind alleged is not only ethically unacceptable, it imposes an economic cost on society. Gross discrimination makes the job market less

attractive to women, and thus distorts the free market just as surely as a combination among traders to crowd out a

Michael Singer, executive director. International Rule of Law Institute, The George Washington University Law School.

From Prof Helen Wallace. Sir, The tone and content of your editorial "Sexual

Washington DC 20052. US

harassment" suggests that you have forgotten that you have at least some women readers There is no difficulty with the law in any country as long as in the workplace men (and, of course, women) keep their hands and their innuendoes to themselves. This is not an issue of "political correctness". but of decent and respectful

behaviour towards colleagues.

Helen Wallace. 49 St James's Drive, Wandsworth Common. London SW17 7RN, UK

Support for Nigeria is needed

genitals, that a male employee

put an air gun between a

From Mr P. Parket. Sir, We are saddened to read the on-going criticism of Nigeria in the media. Nothing is achieved in this complex world by boxing your friends

into a corner. Nigeria is the most populous black country in Africa, having great importance to the world's oil-based economy and to us in the UK, a significant trading partner.

The British have a well-earned reputation of being excellent diplomats and we ask on behalf of all those who trade with Nigeria for a better understanding of today's Nigeria.

Yes, there are tensions, and, let it be said. Nigeria has a legacy of problems whether ethnic or of a political nature. But we must not fall into the easy, and maybe comfortable, position of political correctness with simple dictation to Nigeria of our western terms of

acceptability. To achieve stability and prosperity in the country. Nigeria must be able to look to its friends for respect and support.

P. Parmer, "Understanding Nigeria" Group. AEC (Afrab European Company), 35-37 Brompton Road. Knightsbridge, London SW3 1DE,

Greater transparency before forgiving debt From Mr Karl A. Ziegler. Fund through non-payment of

competitor.

Sir. Your leading article ("Relieving debt", April 24) could have been written by the well-meaning folk at Oxfam and Christian Aid. The piece argues that the eight to 20 heavily indebted poor countries named in last week's proposals for relief of World Bank/IMF debt, are crippled in their efforts at self-improvement without such relief.

It ends by saying that it would be "inexcusable" if the "relatively trivial obstacles" presented by the dissenting votes on the boards of these two august institutions were not overcome by their September annual meetings

What nonsense! Many of the named counties became over-borrowed due to corrupt leadership. If they are an embarrassment to the Bank or obligations, perhaps greater discipline needs to be demanded of them, before any thought of debt-forgiveness is entertained The qualifying

macroeconomic demands traditionally made by two institutions are often waived. for political reasons, when countries fail to realise them completely: witness Russia. Ukraine, Poland, Mexico and. most recently, Kenya. It would be most useful if the organisations'

managements were to demand far greater micro-transparency and accountability on the part of these heavily indebted nations, before thinking of selling off their reserves in funding unmerited debt-forgiveness programmes. Of the listed nations, far greater favour should

certainly be shown to Uganda rather than to Zaire and the Sudan

Uganda's President Museveni has invited greater long-term micro-auditing of all his government's public sector institutions in exchange for greater debt forgiveness. His worthy initiative should be emulated by others on the Bank/Fund list.

Otherwise, throwing further resources at unaccountable governments would aid neither those countries' poor citizens, nor the moral concerns or financial responsibility of the donor community.

Karl A. Ziegler, The Centre for Accountability and Debt Relief, 6 Bradbrook House. Studio Place, Kinnerton Street, London SWIX SEL, UK

Hardly a global perspective

From Mr Grant Kennedy Sir, The advent of globalisation has allowed weak businesses to continue to run where the government would otherwise have had to provide a rescue package. It increases the pool of potential buyers for a given company, thereby improving its liquidity. Clearly there are issues of security that must be addressed when allowing foreign investment to be introduced. Whether the outside interest is Texan or otherwise has no bearing.

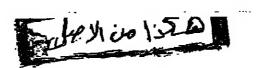
Your article ("Industrialist deplores 'overseas masters' ". April 29) states that Sir William Barlow, former chairman of the Post Office and of BICC, the cables and construction company, has had long experience of business operating globally. His summary dismissal of Texans reveals a myopia that falls short of global perspective.

Grant Kennedy, 1701 Millenia Tower, 1 Temasek Avenue,

Appropriate

From Mr Richard Bittiner. Sir, Given the circumstances surrounding Chancellor Helmut Kohl's UK visit, your photograph of him reviewing members of the Scots Guards outside 10 Downing Street (April 30) caused me to reflect that it may have been more appropriate for the chancellor to have reviewed a contingent of Beefeaters instead.

Richard Bittiner, Bittiner Whitehouse & Cie, 9 rue Charles-Humbert PO Box 5132, Geneva, Switzerland



Number One Southwark Bridge, London SE1 9HL Tel: +44 171-873 3000 Telex: 922186 Fax: +44 171-407 5700 Thursday May 2 1996

Expanding Nato eastwards

Javier Solana, secretary-general of Nato, has been getting a muted reception on his tour of would-be members in central Europe. That is not surprising, since he has lit-ile to offer. "At this moment, no country has been ruled out, and no country has been ruled in", he repeats at each stop.
As President Vaclav Havel

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pointed out after welcoming Mr solana in Prague, "it has been six years since the fall of the Iron Curtain". It is also two years since the alliance's leaders declared that they "expect and would welcome Nato expansion that would reach to democratic states to our east as part of an evolutionary process last autumn Nato completed its study of "how and why" this procase should proceed. But the more invidious decisions on "who and when" will not be taken until this December's summit, at earliest, One reason for this leisurely imetable is that 1996 is an election year both in Russia and the US. No one in Nato likes the idea of giving Russia, a non-member, a veto on the alliance's decisions. But no one wants, either, to help Gennady Zyuganov, the Russian communist leader, achieve victory in June. In reality there is no reason to suppose that many Russian voters will be influenced by Nato's attitude. But repeated warnings from the Yeltsin camp that Nato

Electoral suspicions

have clearly had some effect.

enlargement would strengthen hardline tendencies in Russia

Many Europeans believe that US enthusiasm for enlargement is fuelled by electoral considerations (the "Polish vote"). US policymakers strenuously deny this, but say they hope to delay any move on enlargement until after the US election in November, if only in order to refute such suspicions. It may not be easy for them to do so, however, if Senator Dole takes up the theme during the campaign. "Even when both sets of elections are out of the way, the decision may not look any easter. A victorious Mr Zyuganov may well adopt a conciliatory line towards the west, in which case there will be no lack of western voices urging that this line should be encouraged and rewarded, and that hasty

opposite effect. Equally a re-elected Boris Yeltsin can be expected to continue urging his western friends not to isolate Russia by

expanding Nato up to its borders. In addition, and more persua-sively, countries such as Ukraine and the Baltic states will continue to plead that their security is more directly threatened than that of any central European country, and that any enlargement leaving them out in the cold might actually make things worse rather than better. Yet no known scenario provides for their inclusion in the first wave of new members

Slow processes

Ideally, EU expansion should recede or at least accompany Nato expansion. Once central European countries are within the EU their security will be indissolu-bly connected with that of western Europe, and their inclusion in Nato should seem more natural both to Russians and to Nato's existing members. But advocates of Nato enlargement, especially in the US, are understandably reluctant to make it wait on the slow and tortuous EU processes of intergovernmental conference. reform of the structural funds and common agricultural policy, and separate clause-by-clause entry negotiations with each new candidate for membership. If the EU were capable of seizing

the strategic initiative it would cut this Gordian knot by immediately identifying the first batch of new members and embarking on a broad-brush negotiation with them, aimed at giving them full political membership within two years and leaving the economic detail to be worked out over a long transition period. Nato could meanwhile be working out, with Russia, a new system of collective security based on the Organisation for Security and Co-operation

in Europe.

What is unacceptable is for central Europe to be kept waiting indefinitely while Nato and the EU play "Gaston and Alphonse" That would dangerously demoral ise central Europeans, while encouraging Russians to think they can always intimidate the west if they try hard enough.

From disunity to defeat

Another round of local elections. Another rout. And another bout of speculation about Mr John Major's leadership. For the government, humiliation in the annual council elections has become a depressing ritual. So too has the fevered gossip at Westminster about the

prime minister's future. There is little doubt that the Conservatives will do badly in today's contests. When the same council seats were last fought in 1992, the government was riding high in the aftermath of its general election victory. Now it trails Mr Tony Blair's Labour party by between 20 and 30 points.

The progressive weakening of the independence of local government has also taken its toll. Most important decisions over spending, services and amenities are taken in Whitehall rather in the town halls. The incentive for voters to treat the elections as little more than a national opinion poll has never been greater.
Optimists in Conservative Cen-

tral Office believe the party might lose about 500 of the 1,100 council seats it is contesting this time. Many Tory MPs expect worse. The distic forecasts are of losses of 900 or more seats. Such an outcome would all but eliminate the Conservatives as a serious force in local government. It would also stoke the fires of speculation as to whether Mr Major should remain. The answer that Tory MPs should give to that question is an unequivocal yes. Mr Major offered his party the opportunity to choose a new leader last year. It decided against change. Nothing since suggests that the government can climb from the mire by

Bloody contest

ditching the prime minister.

Those who assume that Mr Major could be replaced by Mr Michael Heseltine, his deputy, in a bloodless Downing Street coup are grading in fantasies. In a speech yesterday to the Newspaper Society, the prime minister gave no inkling that he might stand aside. If he were to be forced out, the deep Tory divisions between left and right, between Eurosceptics and pro-Europeans, would be torn open in a bloody contest. The eventual victor would probably inherit a party which was ungovernable. The electorate, rightly, would conclude that the Conservatives had given up any claim to

remain in office. To focus on Mr Major is also to ignore the more fundamental problems facing the government and the Conservative party. Certaintly there is much that can be criticised in his style of leadership. The prime minister is a tacti-cian rather than a strategist. His anxiety to appease his critics has often been at the expense of a clear sense of purpose. But Mr Major is more a symptom than a cause of the disunity and divisions which so damage the government

Economic realities

His flercest critics are demanding an ideological lurch to the Eurosceptic right. They want to fight the general election on a platform of much lower spending and taxation and of an aggressive assault on the authority of the European Union. But this is a prospectus which matches neither political nor economic realities. As Mr Malcolm Rifkind, the for-

eign secretary, commented yester day, the UK's national interest lies firmly in remaining an active member of the Union. The government cannot renege on past trea-ties. And, for all the wishful thinking among some Eurosceptics, the trade and economic advantages of the single market would not be available outside the EU.

Nor can the government secure easy votes by slashing spending on the welfare state to pay for pre-election tax cuts. In a powerful speech this week, Mr Heseltine offered a timely reminder that general elections in the UK are won not from the left or the right but from the centre. It is always tempting for parties to pander to the prejudices and instincts of their core supporters. But, as Labour discovered during the 1970s and 1980s, to do so is to sacrifice the support of the uncommitted centre whose votes are

essential to win elections. If the Conservatives are to retain any chance of political recovery before the general elec-tion they must face such realities. If nothing else, there will be one clear message from the outcome of today's elections. The road of disunity invariably leads to defeat.





A road strewn with obstacles

Bob Dole's chances of defeating Bill Clinton in November's presidential election look increasingly remote, says **Jurek Martin**

he only poil that matters is the one on the first Tuesday in November when America elects its next president. But a survey of public opinion by Mr Gallup this week should have served as a wake-up call to Senator Bob Dole, now seriously adrift on the road to the White House. It was not so much the numbers

that were chilling for the Senate majority leader and presumptive Republican presidential candidate. A 21-point deficit behind President Bill Clinton may be bad, but previous candidates, including Mr Clinton in 1992 and vice-president Mr George Bush four years earlier, have recovered from double-digit

But it was the invocation of his-tory that showed how steep a hill Mr Dole has to climb. Never in its 60-year record of polling, Gallup ahead as Mr Clinton six months before election day and gone on to lose. Worse, and unlike 1992, all the movement in public opinion now seems to be in the direction of the incumbent. His Democratic party is also reaping the benefit, to the point that the Republicans might also end up losing the control of Congress they won so dramatically

Republicans have been sounding alarm bells for some time, none more loudly than Mr William Kristol, former aide to vice-president Mr Dan Quayle and now editor of the Weekly Standard, a new conservative magazine. "Bob Dole is likely to lose the presidential race to Bill Clinton. He may lose badly," he wrote earlier this week. "The current conventional wisdom in Washington notwithstanding, it is not inevitable that the race will tighten up. Some races simply settle in."
Mr Bill Bennett, education secretary in the Bush cabinet, was among the first to suggest that Mr Dole stand down as majority leader and get on with the business of waging ideological war against Mr Clinton. But Mr John Rasich, chairman of the House budget commit-tee, wondered if he could, given his apparent inability to "articulate the

All three, leading proponents of the conservative revolution that was supposed to have dawned in 1994, have never been particular fans of Mr Dole, to whom newfangled ideology and ideas have always appeared alien. But the Republican governors of California, New York and New Jersey are cut from his pragmatic cloth and they, too, are now warning of impending

Mr Pete Wilson this week joined George Pataki and Mrs Christie Whitman in stating that if the Republican party platform continned, moderate and independent votes will disappear. The governor of California said this, at a press conference, just before a campaign strategy session with Mr Dole. His intervention brought howls of

protest from the Christian Coalition and other social conservatives, and from the rump of Mr Pat Buchanan's campaign. All threatened defections and, in the case of Mr Buchanan, a third-party movement should the pro-life plank be ditched. Mr Dole, never comfortable in talking about abortion in public, sought to placate both sides - thus satisfying neither. He agreed to Mrs Whitman's appointment as a convention co-chair but placed two strong anti-abortionists in charge of the platform committee.

A convention split over the issue, echoing the Houston battle four years ago, bodes ill for Mr Dole's appeal to women voters, among whom he must do better to stand a chance in November. If the 1994 can, Senator Alan Simpson from

Republican congressional landshide reflected the temporary ascendancy of the "angry white male", the gender gap is now working in the oppo-site direction, with poll after poll giving Mr Clinton a 20-point lead among women. This is partly because of abortion and partly vomen's fears about the radical changes to the healthcare and weifare system proposed by Republi-

recently that an bly "inevitable", an admission that induced a volcanic eruption from Rush Limbaugh, still influential from his rightwing radio talk booth. The minimum wage issue is but one example of how the Democrats in Congress, more united than at any time since the 1960s, are making it hard for Mr Dole to run for president from Capitol Hill. They are doing to him what the Republicans did to the Clinton agenda in 1994 when comprehensive health-care reform and a fistful of other proposals were defeated, blocked and eviscerated. The clear purpose is to deny the Republicans any record of legislative achievement on which to run in November.

This fiscal year's budget has finally been agreed, but only after Republican concessions on the environment and education. On immi-gration reform, this week's priority, he has to persuade a fellow Republi-

business lobby is set against. not respond to a quick-fix solution. Repealing the 4.3 cents-a-gailon tax surcharge of 1993 has obvious political appeal but the budgetary consequence - the loss of \$30bn in reve-

But whenever Mr Dole bends in a clearly popular direction, conservatives hold his feet to the fire. Increasing the federal minimum wage, last raised to its present \$4.25 an hour in 1989, is a case in point. Whatever the arguments of economists and the business lobby, it commands broad support, including among moderate Republicaus.

r Dole conceded

savings accounts, a conservative priority, the whole bill may be lost either in Congress or to a presidential veto. But Congress is Mr Dole's milieu and he is unlikely to improve his ratings should he leave it for the campaign trail. The latest set speeches - on the "liberal" Clinton judiciary and the evils of "socialist" public housing – have been wooden. One, in Indianapolis last Saturday, was delivered so late it went largely unreported, a problem that his lessthan-press-friendly campaign encountered in earlier primaries. If there is a "vision", it remains obscured. Nor is there much encouragement

nues over six years - has forced

him to settle for a modest one-year

suspension. Even this left him open

to a fast White House counter-

attack pointing out how often he has supported higher petrol levies. Health insurance reform, another

cause popular in both parties, is

proving a minefield. There are few disagreements with this modest

measure making coverage portable from job to job. But if Mr Dole insists on including tax-free medical

in the "veepstakes", slang for his choice of a running mate. A lethal insider's article by Fred Barnes in the Weekly Standard describes a "dirty bloody battle" between leading aspirants, among them four midwestern governors, former gov-ernor Carroll Campbell of South Carolina and Senator John McCain of Arizona. Much of the mud is

Wyoming, not to support the sort of reductions in the influx of skilled John Engler of Michigan, variously portrayed as looking like a "thug" foreign workers that the Republican womaniser and a draft-dodger.

Mr Colin Powell, the former chair The recent surge in petrol pump prices, Mr Dole is discovering, does

man of the joint chiefs of staff, is seen by many as the only person who can put a Republican in the White House. But there is no evidence that he is interested - and if he were, it may be wondered why he would be interested in second place on the party ticket.
There may be less to fear for Mr

Dole from a Ross Perot candidacy, should one emerge. Some polls sug-gest the electronics billionaire now draws as much support away from Mr Clinton as Mr Dole. But in important states, especially in the south, he could have the opposite effect. In his native Texas, for example, a Perot presence, together with mobilisation of the Hispanic vote by Mr Victor Morales, the Democrat Gramm, could greatly improve the president's chances on what is now unfriendly ground. Second-guessing Mr Perot's intentions is notoriously difficult, but the man's ego is vast and, as Cragg Hines of the Houston Chronicle wickedly points out, the law prevents Mr Perot spending more than \$1,000 "on any candidate other than himself.

Mr Dole, his primary funds, unlike Mr Clinton's, almost exhausted, cannot spend much to promote himself outside Washington over the summer. So he presumably must stay and slug it out in the congressional trenches.

And he must repeat to himself that a decent, moderate conservative ought to have a fighting chance against an incumbent whose popularity is not in the stratosphere and who could be undone by anything from Whitewater to Russia or Bosnia. But sadly for Mr Dole, that is not what the pollsters are finding

OBSERVER.

Zen and the art of voting

Referendums have a way of unlesslying emotions. Take next Sunday's poll in Berlin and the surrounding state of Brandenburg. where voters are being asked to decide whether the two should merge into one single Land.

In an attempt to mobilise the conservative, historically aware vote, the Christian Democratic party in the posh west Berlin suburb of Zehlendorf has put out posters stating that a merger would bring a return to a Christian Prussia".

This is a bit naughty as Prussia - at whose heart sat the present-day region of Brandenburg was abolished by the Allied Powers after the second world war, on the (perhaps unfair) ground that it was the root of all German militarism. And while most of its citizens were certainly nominally Christian, Prussia always prided itself on religious freedom, as far back as Frederick the Great. Such maccuracies have not been lost on the youth wing of the Social

responded with posters calling for a "Buddhist Saxony", Prussia's long time neighbour and rival. Such humour is unusual for a political campaign in Germany.
But then the referendum seems to have acquired its own taste for comedy. Brandenburg's

Democratic party, which has

minister-president - Manfred Stolpe - and his Berlin counterpart - Eberhard Diepgen - recently mounted a motor-bike and a tractor, to show just how easy it is for city and country to come. together. Great photo-call - but hardly very Prussian.

Italian dribbling

■ Franco Bernabé is one man who has breathed a big sign of relief at the centre-left victory in the Halian general elections. As chief executive of ENI, the partially privatised and highly profitable state of company, his job was in the firing line from an incoming rightwing Berlusconi government

Technically he should have been confirmed or replaced a month ago; but the Dini government shied away from moving on such a sensitive appointment in the election run-up. Now word has gone out that Bernabé will on May 14 be confirmed as chief executive for another five years.

The Italian public at large is far

more concerned by the fate of another manager, affected by politics of a different kind. At stake is the future of Fabio Capello, indefatigable manager of AC Milan, the cup-winning football team owned by Silvio Berlusconi. Capello last weekend saw Milan win its fourth league title in his five years' management. His contract is up and he wants to join Real Madrid. But Berlusconi is

reluctant to let him go; so are tip. fans.

My dear, it's divine

Late lest night Lama Yeshe. the abbot of the Samye Ling
Tibetan Centre near Eskdalemnir
in Scotland, arrived in Moscow Alls mission - to help set up the city's first Buddhist temple. He is there at the invitation of the city's budding Buddhist community, Buddhism has been attracting thousands of new adherents. particularly among the young.

Testifying to the religion's new popularity, the Dalai Lama sinaself

observer spots an opening here for Boris Yelisin, now facing a tough prospect in the furtherming presidential elections. While his communist rival Gennally Zyuganov is embracing old workerist symbols. Yeltsin could drop by the new temple and ingratiate himself with the disaffected youngsters. Mind you, he'd probably only be greated by the sound of one hand clapping.

Brother love

■ How incestnoon is the world of French investment banking. There was a time when Lazard Frères advised on every deal, sometimes ringing enforcement—the poll is on both sides. Now the Americans up to a year away, and Patten has have broken in on a transaction at to give Hong Kong back to the the heart of the French financial Chinese in July 1997.

establishment. Goldman Sachs is advising Credit Agricole on its

Compagnis de Suez has retained Morgan Stanley. But the community of French investment bankers remains small. Family liked, in fact. Goldman Sachs's team is led by Yoel Zaoul. Morgan Stanley's by his brother Michael. Other investment banks wanting to get into the Purisian scene can always call the middle. tment hankers remains small brother, currently an optician.

Cook heats the pot ■ Robin Cook, Britain's shadow foreign secretary, has been taking the temperature in Hong Kong, including a walkabout with Governor Chris Patien in Wanchai,the girlle bar district. Cook was extremely impressed by the warm reception Patter received. So does be see Pattern as potential leader of the Tories? Ever nimble footed, Cook merely said that Patten "has achieved much more popularity in Hong Kong than he could ever possibly achieve with the Conservative party in Britain*. The normally icy Cook continued. He would require an ewind lot of persuading, he said, of the need to replace Patten, should Labour take office after the next general election. Maybe not such a

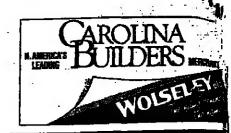
Financial Times

100 years ago Assassination of the Shah

A despatch from Teberan announces that the Shah of Persia has been shot. The doctor of the German Legation who extended his Majesty only arrived in time to certify that life was extinct (Reuter). The news that the Shah has been assessinated will cause a shock of surprise and indignation throughout Europe, where the unfortunate potentate was well. known owing to his not infrequent visits. The motive of the crime is not yet known; possibly it never will be. The political consequences of the event may be far-reaching. [The Shah assassinated at a time: of increasing exposure by his country to western trade and ideas was Nastr ud-Din.]

50 years ago Canadian Pacific Ballway Despite a falling off in traffic volume in 1946 – a frend which is expected to continue - Mr. D.C. Coleman, chairman and president of the Canadian Pacific Railway Company, does not anticipate that calls upon railway services will be drastically reduced in the immediate future. But he warned shareholders at the annual meeting in Montreal yesterday that the existing narrow margin between earnings and expenses left the company extremely vulnerable.

16



Italian poll winner offers key posts to Berlusconi

The rightwing alliance headed by Mr Silvio Berlusconi, the former Italian prime minister, has agreed to discuss an offer from the Olive Tree coalition, which won last month's general election, to take important posts in

the new Italian parliament. The decision comes as the rightwing parties are debating whether to act as a united opposition such as the Italian parlia-

ment has never seen before. Immediately after the right-wing parties' election defeat, Mr Giuliano Ferrara, editor of the pro-alliance daily Il Foglio, argued strongly for the creation of a British-style opposition.

He said the alliance parties should combine to form a coherent opposition block, form a shadow cabinet and reject any deals with the government. In this way the opposition could prepare for the next elections to offer a genuine alternative. But the defeated rightwing alli-

News Corp

group in TV

card law suit

Continued from Page 1

differing positions. Mr Berlusconi entered politics two years ago purely to become prime minister, and his Forza Italia movement is still wholly unaccustomed to the idea of opposition.

The former Christian Democrats who agreed to ally with Mr Berlusconi are equally unused to opposition, while the National Alliance of Mr Gianfranco Fini is handicapped by the need to prove it has dissociated itself from its

ascist heritage.
The leading figures in the rightwing alliance met on Tuesday to discuss the future of the opposition, and the agreement to accept the Olive Tree offer suggests the moderates overcame those arguing that the opposition should cut no deals with the gov-

After the April 21 general elections, Olive Tree leaders made clear they wanted a constructive dialogue with the opposition. Both Mr Romano Prodi, the Olive Tree leader, and Mr Massimo

ance has yet to reconcile widely D'Alema, head of the Party of the differing positions. Mr Berlusconi Democratic Left (PDS), the dominant group in the alliance, said they did not want a situation in which the victors at the polls

occupied all the seats of power. The offer to Mr Berlusconi and his allies was intended to prevent a repetition of the situation produced by the March 1994 general election. Then Mr Berlusconi's rightwing alliance sought to place its members in all the major jobs in parliament and recruited supporters for posts in sensitive state companies and institutions such as the RAI

broadcasting organisation. The Olive Tree is willing to offer the Berlusconi camp the post of speaker of one of the two houses of parliament and the lead role in at least two of the main parliamentary commissions. The speakers of the senate and chamber of deputies are the two most important institutional roles after the presidency.

Observer, Page 15

top executives' pay after expenses row

success of BSkyB, and other

parts of News group's TV interests, because they are designed to easure only paying subscribers receive transm In taking action against Mr

Bruce Hundertmark, a former News International director, and 10 other defendants, News group alleges he had an undisclosed interest in a company which held 20 per cent of the group's smart card subsidiary, News Datacom. It is also claimed that others conspired to ensure the group became reliant on one supplier.

Mr Arthur Siskind, a director of News Corp and its general counsel, concedes that News group's management "did not have the technical expertise to challenge" a former employee named in the writ, alleged to have taken part in the conspir-

Tax avoidance questions have also arisen involving News

group's smart card business. Internal company documents seen by the FT show how News and structure from 1988 to 1992 to minimise the tax payable to authorities in Israel, where its earch and development subsidiary operated, and in the UK. An independent tax experi

said it was an example of "extreme tax planning". News group says it has broken no laws. Israeli tax authorities have "indicated that they do not

intend to pursue any claim against News Datacom Documents seen by the FT also show how News Datacom executives had some of their remuneration paid as consultancy fees, but booked as directors' fees in

> Europe today The British Isles and most of Spain will have fresh to strong breezes. Low pressure in the Bay of Biscay will

bring cloud and rain to western France, the western Iberian peninsula and south-east England. The Benelux and south-eastern France will have

and the Balkan states will have

thundery showers, and south Europe will be sunny, with temperatures of more than 20C in

Five-day forecast The Benelux and France will have

widespread showers over the next

Italy and central Europe will move

slowly east, and western Russia will remain wet. The UK will become

warm and dry, but with some show

few days, becoming dry and sunny by

Greece and Turkey.

in the north.

showers and some thunder. Western Europe will remain mainly cool. Most of Germany will be cloudy and wet, and the Czech Republic and eastern Poland will have patchy rain. Romania

Ireland to probe

By a Dublin Correspondent

An inquiry has been announced into the pay of top executives of Ireland's state-owned companies following the revelation of alleged irregularities at Bord na Mona, which produces peat for the country's power stations.

The government move follows its admission that Mr Eddie O'Connor, former managing director of Bord na Mona, claimed E141,000 (\$218,850) in expenses over the three years to last March of which I£39,000 was paid without receipts.

Under government guidelines Mr O'Connor was entitled to a package worth around I2100.000 a year compared with the I£150,000 to I\$200,000 he was paid in each of the last three years.

Mr O'Connor has said all elements of his package were approved by the previous chairman, Mr Brendan Halligan, a for-mer secretary-general of the Irish Labour party. These included flights for his family and payments towards a car for his wife.

Mr O'Connor is credited with turning around the debt-ridden state company, which made profits of ISSm on turnover of IS130m

in 1994, the most recent year for which figures are available Details of Mr O'Connor's remuneration package came to light following the appointment of a new chairman, Mr Pat Dineen, in

He stopped all unreceipted expense payments and put a stop to the bulk purchase of expensive French wine for "corporate pur-poses" and the use of a timeshare in Portugal by senior executives He also commissioned a report from Price Waterhouse which identified a number of other

"extra to business" expenses and purchase of suits in lieu of medical insurance. The directors of the company have called for a second report covering Mr O'Connor's nine

alleged irregularities including

years at Bord na Mona. Mr Ruairi Quinn, minister for finance, has asked all ministers to confirm that the remuneration of the chief executives of the state companies under their con-

Bodies covered by the investigation include utilities such as the Electricity Supply Board and the state gas company Bord Gais.

Cummins and Fiat venture

Europe. In addition, Cummins believes it will make a further 160,000 or so engines a year of the new type at its plants in the US for sales in

The deal seems certain to intensify the competition between Cummins and Perkins of the UK, its main rival in multipurpose diesels. Perkins also collaborates with several manufacturing groups such as the Agco and Navistar tractor and truck

Developing nations criticise **Asian bank** over loans

By Edward Luce in Manila

Leading Asian borrowers, including Malaysia and China, strongly criticised the Asian Development Bank yesterday for attaching stringent conditions to

Mr Anwar Ibrahim, deputy prime minister of Malaysia, said the ADB, holding its annual meeting in Manila this week, had displayed "bureaucratic rigidity" to recipient countries and had often failed to pursue proper development aims.
Neither country singled out

specific policy conditions for criticism, but the speeches were a thinly velled attack on the ADB's goal of ensuring that 40 per cent of total loan volume and 50 per cent of all projects be directed to social and environmental ends.

The policy, which the ADB adopted in 1994, was seen as a concession to the aims of leading western donors, notably the US.

Meanwhile, China and India have complained at being excluded from the ADB's soft-loan window, which extends subsidised loans to poorer Asian nations. The US rejected their demand for eligibility.

Mr Ibrahim told the ADB gov-

ernors: "Imposing uniform measures on every country by ignoring their level of development and social costs involved in the reform process would be tantamount to a form of punishment

"Donors should not use their contributions as a means to dictate terms and conditions that aggravate rather than alleviate the difficulties of poor countries." The ADB, which until 1994 concentrated lending almost exclusively on set-piece infrastructure - mainly power and transport -projects aimed at boosting economic growth rates in Asia, has

experienced difficulty in splitting the loans halfway between social and more commercial projects. Financial rates of return on social and environmental proects are often too low for market-level interest rates on the

loans to be viable. The cost of borrowing on more traditional projects has subsequently been pushed up to a mindate subsidies on the "softer" lending projects.

Countries such as China have complained this is tantamount to meddling in its domestic politics. "The bank should give adequate attention to the importance

of economic growth in its pursuit of social development objectives," Mr Jin Jieyan, deputy governor of the People's Bank of China, said vesterday.

To impose conformity . . . is not likely to work and may even produce an adverse impact on some developing members."

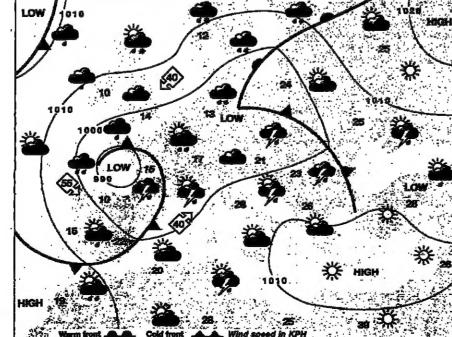
US seeks to bar China, India from fund, Page 6

Continued from Page 1

Cummins customers mainly in

North America and possibly Asia.

FT WEATHER GUIDE



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THE LEX COLUMN

Chinese crackers

The cut in Chinese interest rates has more symbolic than practical significance, given the state of China's banking system. However, it suggests that after almost three years of austerity. when the government tried to subdue an economy that was totally out of control, the authorities are finally tak-ing their foot off the brakes. Hence the surge in share prices of Hong Kong-listed Chinese companies yesterday. Chinese interest rates are an

extremely blunt instrument, since banks do not operate as commercial organisations and lending has traditionally been dictated by local party chiefs. But with retail price inflation at 8 per cent in the first quarter down from a 1994 peak of 21 per cent – the government is signalling that it feels able to add fuel to the economy again. There is a risk that the ailing state sector will see this as encourag ment to stick its snout back into the banking trough. The 26 per cent increase in state bank loans in the first quarter rings some alarm bells. However, Beijing has established greater control over the regions and should be able to prevent another feeding frenzy. Besides, a more active interest rate policy offers hope that the government will accelerate reforms of the banking system.

Given the flood of money into Hong Kong that accompanied mainland China's last economic boom, the colony's property developers represent proba-bly the most sensible bet on an easing of the Chinese austerity programme. After all, 12 of the 18 Chinese companies listed in Hong Kong saw profits fall last year, and slack management was as much to blame as the economy.

KLM/Northwest

KLM and Northwest Airlines are sending out mixed signals about the future of their partnership. Northwest claims it would like to expand the scope of the partnership, even though it admits KLM is considering calling it off. The reality is that the relationship looks untenable. The airlines' codesharing deal has been one of the most commercially successful. But follow-ing Northwest's introduction of a polson pill to prevent KLM from raising its stake in Northwest to 25 per cent, the two companies are now locked in a legal battle, as KLM tries to restore its right to increase its holding and Northwest struggles to fend off what it sees as threat of a takeover.

History suggests that joint ventures are inherently unstable: ultimately, they either break up or develop into a closer union. In this case, the obvious temptation for KLM, in the face of



Jel 93 1994

Source: FT Botal . .

Northwest's cold shoulder, is to look eisewhere. As one of the best operated European airlines, it would have no problems finding another partner: indeed, American Airlines, still flying solo, might welcome an approach. In addition, KLM has said it still wants to hook up with another European airline. All this means the dream-team of British Airways, KLM and American is still worth fantasising about.

UK power

If Britain's generators have a clear "plan B" strategy, they are keeping it well-hidden. The problem is simple: the government's decision to block their bids for regional electricity companies has left them with remarkably strong balance sheets and nowhere to put the money. The right answer now is to hand big sums back to shareholders, reshaping the companies' ineffi-

cient capital structures.

The worry for shareholders is that it is far from clear whether this is the plan - or indeed whether there is one. For managements, there must be a strong temptation to hold back, keeping investors sweet with a promise to increase dividends over the medium term. That way, cash can be gradually dribbled out to help massage the gloomy prospects for earnings. And a big war-chest can be kept handy, so managements need not be stuck with the boring business of managing a UK

generator. If sound acquisitions can be found, this is all well and good. But with high-paying US power companies scouring the globe, the odds are against it; the hot competition in recent Australian power sales is certainly a bad sign. Moreover keeping balance-sheets strong on the offchance of some natty acquisition is

not only inefficient; it is also danger ous. It offers a particularly juicy target for the Labour party's planned wind-fall tax. And it leaves the companies vulnerable to takeover. For National Power in particular, handing out a big chunk of cash now would certainly raise the stakes in its poker game with

Southern Company.

The generators are busy making up their minds. If shareholders want their interests to be heeded in this process, they need to get moving, and make their voices clearly heard.

Railtrack

The train is leaving the station, and it is time for investors to decide whether to hop on. A glance at Rail-track's financial strength provides powerful reasons to do so: formidable cope for cost-cutting, fat provisions to absorb any nasty surprises and a distinctly healthy balance sheet. Yet most investors are taking a striply conservative view of the company's future cashilow; with a more realistic view setting in over time the prospects for the shares should be rosy. But even if the cautious view turned out to be correct, it would not justify a yield as high as the 6.8-7.6 per cent range for retail investors implied by the indicative pricing. Even the water sector, which the market tends to undervalue and which is much further down the cost-cutting curve, trades at an aver age of 6 per cent.

Ah yes, say the doubters, but what about the Labour party? They are right to take the threat seriously. For-get nationalisation; it is Labour's plan to bring the rail regulator under government control which is the real warry. That would give it the power to exploit Railtrack's financial strength to political advantage: it could, for instance, force the company into a chronically uneconomic investment such as Crossrail. Railtrack could avert this threat by tautening its bal-ance sheet, handing cash back to shareholders before the election. But investors cannot count on it.

In short, investors have to balance the company's financial potential against the likelihood that a Labour government will constrain investors' ability to get their hands on it. This is not vastly different from the judgment investors have to make in the water sector, if anything, the big difference in rail is not that the political risks are higher but that the financial potential looks greater. Yet the shares are cheaper. They are a buy.

> Additional Lex comment on textiles, Page 23

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